



Derbyshire County Council.

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# ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

For the Year 1930,

BY

W. M. ASH,

M.B., B.S. (LOND.), F.R.C.S. (ED.), D.P.H. (VICT.),

COUNTY MEDICAL OFFICER OF HEALTH.

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DERBY :

J. W. SIMPSON AND SONS, PRINTERS, FRIAR GATE.



*To the Chairman and Members of  
The Derbyshire County Council.*

MY LORD DUKE, LADIES AND GENTLEMEN,

I have the honour to present to you the Forty-first Annual Report on the Health of the County of Derby.

The Report this year takes the form of a Survey Report and gives information for the period since the last Survey Report published in 1925. This is the second of a series of 5-yearly Survey Reports which will be required by the Ministry of Health. It has been drawn up to meet the requirements of the Ministry and, as far as possible, I have endeavoured to set it out as a book of reference.

This year I have been able for the first time to get the Report published in the Second Quarter of the year, and I should like to express my appreciation of the efforts of the Officers of District Councils to supply me with information in time to enable me to do this.

Generally speaking, the health of the County has been good and the Vital Statistics compare very favourably with those of previous years. There has been a marked decrease in the infantile mortality rate from 67·6 in 1929 to 61·45, the rate for the year under review. This is the lowest infantile mortality rate on record, and it has dropped from 78·4 since the last Survey Report in 1925.

The death rate is appreciably lower than the rate for the previous year.

The birth rate has shewn its first inclination to rise during the last ten years. Whether this is considered a desirable feature appears to be a matter of opinion.

It is to be remarked that whilst the deaths from scarlet fever during the year numbered 7, the deaths from measles are exactly eight times that number and yet the isolation hospital system appears to expend most of its energy on the isolation of scarlet fever.

During the year a further extension was made to Brethby Hall Hospital by the opening of a new 32-bed block for adults suffering from surgical tuberculosis.

The outstanding feature of the year was the coming into force on April 1st of the Local Government Act, 1929. This Act has placed very important duties upon the County Council, many of which are in connection with the Health Services.

As a result of the Local Government Act, great possibilities for the improvement of health services have been presented, but whether these possibilities will become probabilities appears to me, after my experience during the first year of the Act, to depend very much upon whether stress is laid upon the "local" rather than the "government." Modern methods of prevention and treatment, and modern ease of inter-communication all point to the need for more combination, co-ordination and co-operation and there will be no real progress till this is realised.

I am,

Your obedient Servant,

W. M. ASH,

*County Medical Officer of Health.*

*New County Offices,  
St. Mary's Gate, Derby,  
June, 1931.*



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## **PUBLIC HEALTH STAFF.**

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### **COUNTY MEDICAL OFFICER OF HEALTH:**

W. M. Ash, M.B., B.S., F.R.C.S., D.P.H.

### **DEPUTY COUNTY MEDICAL OFFICER:**

I. C. Mackay, M.B., Ch.B., D.P.H. (*resigned 30/12/30*).

### **TUBERCULOSIS OFFICERS:**

B. S. Nicholson, M.D., D.P.H.

P. Heffernan, B.A., M.D., B.Ch., B.A.O.

C. Kingston, M.R.C.S., L.R.C.P., D.P.H.

### **BACTERIOLOGIST:**

Sheila M. Ross, M.D., B.Ch., D.P.H.

### **VENEREAL DISEASES OFFICER:**

H. R. M. Richards, M.B., B.Ch. (*part-time*).

### **MEDICAL SUPERINTENDENT AT WALTON SANATORIUM:**

A. N. Robertson, M.R.C.P., M.D., D.P.H.

### **ASSISTANT RESIDENT MEDICAL OFFICER AT WALTON SANATORIUM:**

Margaret V. Saul, M.B., B.S., M.R.C.S., L.R.C.P. (*resigned 30/11/30*).

Vida Stark, M.B., Ch.B., (*commenced 30/11/30*).

### **CONSULTING SURGEON, WALTON SANATORIUM:**

J. W. Tonks, M.D., F.R.C.S. (*commenced 1/2/31*) (*Died 4/5/31*).

### **CONSULTING SURGEON, BRETBY ORTHOPÆDIC HOSPITAL:**

Naughton Dunn, M.B., Ch.B.

### **MEDICAL SUPERINTENDENT, BRETBY ORTHOPÆDIC HOSPITAL:**

G. A. Q. Lennane, M.A., M.B., B.Ch.

### **ASSISTANT RESIDENT MEDICAL OFFICER, BRETBY ORTHOPÆDIC HOSPITAL:**

Elizabeth Grierson, M.B., Ch.B.

### **HON. CONSULTING RADIOLOGIST AND ELECTROLOGIST:**

A. R. Laurie, M.B., Ch.B., D.M.R.E.

### **MATERNITY AND CHILD WELFARE OFFICER:**

Edith E. Stephens, M.D., B.S.

### **CONSULTING OBSTETRICIANS:**

N. L. Edwards, F.R.C.S., Derby.

H. T. Hicks, F.R.C.S., Derby.

W. W. King, F.R.C.S., Sheffield.

F. H. Lacey, M.D., Manchester.

C. D. Lochrane, F.R.C.S., Derby.

M. H. Phillips, F.R.C.S., Sheffield.

C. E. Potter, M.D., Derby.

### **ASSISTANT SCHOOL MEDICAL AND M. AND C. W. OFFICERS:**

W. J. Pierce, M.B., Ch.B.,

F. J. Burke, M.D., Ch.B.,

A. Macmillan, M.B., B.Ch., D.P.H.,

Wilhelmina W. Hendry, M.B., B.Ch., D.P.H.,

H. S. Bryan, M.R.C.S., L.R.C.P.,

H. N. Popham, M.B., Ch.B., B.S.,

Ethel W. Morris, M.R.C.S., L.R.C.P., D.P.H.,

### **OPHTHALMIC SURGEON (School Medical & M.C.W.):**

T. E. A. Carr, M.B., B.S.

## **Public Health Staff—continued.**

**EAR, NOSE & THROAT SURGEON (School Medical & M.C.W.):**

Margaret S. Purce, M.B., B.Ch., F.R.C.S.

### **COUNTY ANALYST:**

John White, F.I.C.

**SENIOR DENTAL OFFICER (School Medical & M.C.W.):**

H. P. Sutcliffe, L.D.S.

### **DENTAL OFFICERS:**

M. Lewis, L.D.S.,  
C. L. Noble, L.D.S.,  
Betty C. Hamilton, L.R.C.P. & S., L.D.S.,  
Elizabeth E. Grant, L.D.S.,  
Doris M. Thomson, L.D.S.,  
Christine B. Calder, L.D.S.,  
Cicely Jefferson, L.D.S.,  
Josephine Dolan.

Also six Dental Attendants and three Dental Clerks.

### **ORGANISER OF INFANT WELFARE:**

Miss E. Gray.

### **REGIONAL INSPECTORS OF MIDWIVES.**

Miss Sleigh,  
Miss Thorpe,  
Miss Wilson,  
Miss Woodford.

### **ORTHOPÆDIC NURSES:**

Miss E. Garratt, C.S.M. & M.G.  
Miss E. Taylor.

### **COUNTY SANITARY INSPECTORS:**

H. Dickinson, Cert. R.S.I., Cert. Meat Inspector.  
H. Mallinson, Cert. R.S.I., Cert. Meat Inspector.

### **FOOD & DRUGS SAMPLING OFFICER:**

W. Etchells.

### **ASSISTANT BACTERIOLOGIST:**

C. F. Peckham.

### **LABORATORY ASSISTANTS:**

A. Morley, Cert. B.L.A., A. Yeomans, C. Robertson.

### **RADIOGRAPHER:**

H. A. Wainscott, M.S.R.

### **CHIEF CLERK:**

T. O. Morrell.

### **CLERKS:**

H. R. Pedley, H. Richardson, F. Beeston, Cert. S.I.B.,  
H. Littlewood, H. Haddock, E. L. Eyre, E. J. Arnot,  
L. A. Buttlng, Miss Alexander, Miss Booth, Miss Smith,  
Miss Waller, Miss Allsop.

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There are eight part-time Officers in charge of Infant Welfare Centres. Details of these will be found in Table XXIV.

There are 81 Public Vaccinators (including nine at Institutions) and 75 Poor Law District Medical Officers. All are engaged in private practice. There are also 19 Vaccination Officers.

There are six subsidised midwives.

# LIST OF HEALTH VISITORS.

<i>Name.</i>	<i>Qualification</i>	<i>Reference No.*</i>	<i>Date commenced duty.</i>
Gomm, G. E.	... 3, 4, 5, 6, 7	... ..	1/9/08
Harvey, A.	... 2, 3, 5	... ..	1/9/13
Spetch, R.	... 2, 3	... ..	21/4/13
Fisher, D.	... 3, 4, 5, 6	... ..	1/5/14
Rodgers, M.	... 3, 5, 6, 7	... ..	1/2/15
McNulty, A.	... 7 (Dispensary Nurse)	... ..	16/6/15
Wilson, M.	... 3, 4, 6, 7 (Regional Insp. of Midwives)	... ..	12/7/15
Liddle, A. L.	... 3, 4, 5	... ..	27/9/15
Fisher, C. H.	... 3, 4, 5, 6	... ..	21/12/15
Siddons, B.	... 1, 3, 4, 5, 6	... ..	10/8/16
Orpin, C. A.	... 2, 3, 4, 6	... ..	5/2/17
Hughes, D. C.	... 3, 4, 5	... ..	27/2/17
Rose, J.	... 3, 4	... ..	3/3/17
Blood, W. S.	... 2, 3	... ..	1/9/17
Stevens, A. L.	... 2, 3	... ..	21/9/17
Webb, E.	... 3, 4	... ..	21/9/17
Field, C.	... 2, 3, 5, 6	... ..	1/10/17
Major, C. B.	... 2, 3	... ..	1/10/17
Stevens, L.	... 2, 3, 4, 6	... ..	29/6/18
Martin, E.	... 3, 5, 7	... ..	10/9/18
Smith, M. L.	... 2, 3, 5	... ..	1/1/19
Clarkson, A. L.	... 1, 3, 4, 5, 6, 7	... ..	18/3/19
Spencer, E. A.	... 2, 3, 5, 6	... ..	17/3/19
Williams, G.	... 1, 3, 4, 5, 6	... ..	1/4/19
Woodford, D.	... 2, 3, 5 (Regional Insp. of Midwives)	... ..	8/12/19
Booth, E.	... 3, 4, 5	... ..	16/8/20
Sleigh, F.	... 2, 3, 5, 6 (Regional Insp. of Midwives)	... ..	6/9/20
Beardmore, B.	... 2, 3	... ..	25/10/20
Quinn, E.	... 2, 3, 5	... ..	20/10/20
Priestley, M.	... 2, 3	... ..	17/2/21
Nuttall, J.	... 3, 4	... ..	1/3/21
Agutter, M.	... 1, 3, 4	... ..	22/8/21
Brewster, C.	... 2 (Theatre Nurse)	... ..	1/9/21
Sterling, E. M.	... 3, 5	... ..	1/9/21
Millington, H.	... 2, 3, 5	... ..	29/5/22
Latham, B. A.	... 2, 3, 5 (Clinic Nurse)	... ..	9/10/22
Hinchliffe, M. I.	... 2, 3	... ..	21/3/23
Clark, M.	... 1, 3	... ..	8/1/24
Wood, Irene M.	... 2, 3, 7	... ..	19/2/24
White, G.	... 2, 3, 7	... ..	25/3/24
Watson, E.	... 2, 3	... ..	27/3/24
Sheldon, F.	... 1	... ..	5/1/25
Dennis, S.	... 2, 3	... ..	23/3/25
Freeman, E.	... 2, 3, 7	... ..	22/3/26
McIntosh, A. J.	... 2, 3, 7	... ..	2/1/28
Webster, E.	... 2, 3	... ..	3/9/28
Fitzmaurice, M. M.	... 2, 3	... ..	4/2/29
Hitchcock, M.	... 2, 3	... ..	8/5/29
Avery, Florence	... 1, 2, 3	... ..	27/1/30
Easton, Alice A.	... 2, 3	... ..	17/2/30
Reid, Gladys M.	... 1, 2, 3	... ..	3/3/30
Macfarlane, A. T.	... 2, 3	... ..	10/12/30
McGaw, J.	... 2, 3, 5	... ..	10/12/30

(one vacancy).

With the exceptions indicated, all the Health Visitors act as Visitors under the M. & C. W. and Tuberculosis schemes and as Mental Deficiency Act Visitors, during 1930 as Blind Person Visitors, and as School Nurses in the area of the County allocated to them. In addition, certain Health Visitors take duty at Tonsil and Adenoid, Ear, and Dental Clinics, and also Tuberculosis Dispensaries.

- \*1. H. V. Cert. (Approved Ministry of Health).
2. Trained Nurse.
3. Certificate of the Central Midwives Board.
4. Sanitary Inspector.
5. H. V. Cert. of Royal Sanitary Institute.
6. Maternity and Child Welfare Works Certificate, Royal Sanitary Institute.
7. Fever Nursing or other special training.







**TABLE I.**

**Birth Rate and Death Rate from the Seven Principal Zymotic Diseases and all Causes  
and Infantile Mortality in the Whole County during the last Forty Years.**

Year.		DEATH RATES PER 1,000 OF POPULATION.								Death Rate from all Causes.	Birth Rate.	Infantile Mortality per 1,000 Births.
		Small Pox.	Scarlatina	Diphtheria & Membranous Croup.	Typhoidal Fever.	Measles.	Whooping Cough.	Diarrhoea	Seven Principal Zymotics			
1891 to 1900	WHOLE COUNTY ...	.028	.16	.17	.16	.43	.30	.58	1.87	17.1	33.7	147
	England and Wales ...	.012	.15	.27	.18	.39	.36	.71	2.14	18.3	29.9	153
1901 to 1910	WHOLE COUNTY ..	.004	.10	.16	.08	.26	.24	*.58	*1.58	14.1	28.5	126
	England and Wales ..	.016	.10	.17	.10	.30	.27	.77	1.50	15.3	27.1	128
1911 to 1920	WHOLE COUNTY ..	—	.04	.16	.03	.24	.16	.40	1.03	12.66	24.07	99
	England and Wales ..	.000	.04	.14	.03	.27	.18	.51	1.17	13.85	21.90	100
1921	WHOLE COUNTY ...	—	.02	.07	.01	.04	.10	†.26	.50	11.16	24.48	77
	England and Wales ...	.00	.03	.12	.02	.06	.12	†.34	.69	12.1	22.4	83
1922	WHOLE COUNTY ...	—	.02	.07	.003	.05	.14	†.13	.41	10.78	21.97	72
	England and Wales ...	.00	.04	.11	.01	.15	.16	†.13	.60	12.9	20.6	77
1923	WHOLE COUNTY ...	—	.01	.04	.01	.13	.14	†.14	.47	10.72	21.13	75
	England and Wales ...	.00	.03	.07	.01	.14	.10	†.15	.50	11.6	19.7	69
1924	WHOLE COUNTY ...	.00	.01	.05	.01	.06	.09	†.13	.35	11.00	20.75	70.5
	England and Wales ...	.00	.02	.06	.01	.12	.10	†.14	.45	12.2	18.8	75
1925	WHOLE COUNTY ...	.00	.03	.09	.00	.11	.12	†.10	.45	11.45	20.42	78.4
	England and Wales ...	.00	.03	.07	.01	.13	.15	†.15	.54	12.2	18.3	75
1926	WHOLE COUNTY ...	—	.03	.06	.01	.07	.15	†.11	.43	10.57	19.23	71.1
	England and Wales ...	.00	.02	.07	.01	.09	.10	†.15	.44	11.6	17.8	70
1927	WHOLE COUNTY ...	—	.01	.08	.01	.04	.10	.09	.33	11.63	18.02	71.3
	England and Wales ...	.00	.01	.07	.01	.09	.09	.10	.37	12.3	16.7	69.0
1928	WHOLE COUNTY ...	—	.01	.07	.01	.11	.04	.08	.32	10.20	17.80	63.0
	England and Wales ...	.00	.01	.06	.01	.11	.07	.11	.37	11.7	16.7	65.0
1929	WHOLE COUNTY ...	—	.01	.07	.01	.03	.09	.10	.31	11.57	16.64	67.6
	England and Wales ....	.00	.02	.08	.01	.08	.15	.13	.47	13.4	16.3	74.0
1930	Urban Districts ...	—	.02	.10	.01	.08	.03	.08	.32	10.42	16.65	65.3
	Rural Districts ...	—	.00	.10	.00	.10	.07	.09	.36	9.86	17.20	57.3
	WHOLE COUNTY ..	—	.01	.10	.01	.09	.05	.08	.34	10.15	16.92	61.4
	England and Wales ..	.00	.02	.09	.01	.10	.05	.09	.36	11.4	16.3	60.0

\* Since 1901 the Deaths from Enteritis, etc., are included.

† Deaths from Diphtheria & Membranous Croup.

# Report on the Health of Derbyshire for the Year 1930.

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## STATISTICS AND SOCIAL CONDITIONS.

### AREA.

The Administrative County of Derby comprises 40 Sanitary Districts, four of which are Municipal Boroughs, 21 Urban Districts and 15 Rural Districts. At the end of 1930 the County had a total area of 643,232 acres, 92,531 in the Boroughs and Urban Districts and 550,701 in the Rural Districts.

### POPULATION.

The Registrar-General's estimate of the population of the Administrative County of Derby as at the middle of 1929 is 624,300, an increase of 1,900 on the figure for 1928. The Registrar-General's estimate of the population for 1930 is not available at the time of writing this Report.

The population of each Sanitary District is given in Tables II. and IIa.

### INHABITED HOUSES.

The number of "structurally separate dwellings" in the Administrative County at the time of the Census, 1921, was 124,663, the number of private families being 130,139.

The estimated number of houses in the County at the end of 1930 was 149,001 of which 76,309 are in Boroughs and Urban Districts and 72,692 in Rural Districts.

During 1930, 3,538 new houses were erected.

Particulars relating to Housing work done in each District are given in Tables XXXV. and XXXV. (a).

### RATEABLE VALUE.

The Rateable Value of the Administrative County of Derby in April, 1930, for County Rate purposes was £2,622,643, and a Penny Rate over the whole County represents the sum of £10,226.

## PHYSICAL FEATURES AND CHIEF OCCUPATIONS.

The main industries which give the people of this county occupation are coal mining, carried on in the East and North-East and in a small area in the South-Western portion of the county, and agriculture, particularly in the Western and Central parts of the county. The staple industries in the extreme North-Western area of the county adjoining Lancashire are those connected with the cotton trade, whilst in the South-Eastern area adjoining Nottinghamshire the lace trade is the chief occupation. In this area, too, artificial silk manufactories absorb an appreciable portion of the population. In the Northern and North-Central areas the chief industries are quarrying, limestone crushing and lime burning, working and dressing millstone grit, and silica brick making. A number of these industries come under the heading of "Refractories Industries," some of which are known to be pre-disposed to pulmonary disease. As was pointed out in a Special Report on Silicosis appended to my Annual Report for 1926, the death rate from phthisis amongst workers in the refractories industries has been considerably reduced in this County.

In the extreme South-Western portion of the county, pottery manufacture is one of the prominent industries.

## VITAL STATISTICS.

The Vital Statistics relating to each District in the County for the year under review are given in Tables II. and II(a). and the following are extracts from them, given in a form required by the Ministry of Health :—

					Rate per 1,000 of population.
		<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	
Live Births	{ Legitimate	5,244	4,898	10,142	} 16.92
	{ Illegitimate ...	228	192	420	
Deaths	... ..	3,371	2,968	6,339	10.15
No. of women dying in or in consequence of childbirth		}		From sepsis	18
				From other causes	26

	<i>Legitimate.</i>	<i>Illegitimate.</i>	<i>Total.</i>
Deaths of infants under 1 year of age per 1,000 births	57.2	104.7	61.45
Deaths from Measles ... ..	...	...	56
Deaths from Whooping Cough	...	...	32
Deaths from Diarrhoea (under 2 years)	...	...	53

**Infantile Mortality.**—The Infantile Mortality rate for the year under review was 61.45 per 1,000 births.

**Births.**—The Birth Rate for the year was 16.92 per 1,000 of population, compared with 16.64, the rate for 1929. The numbers



Table II.

# COUNTY OF DERBY. Year ending December 31st, 1930.

Table giving the Birth Rates and the Death Rates from several causes, in each of the URBAN Sanitary Districts of the County.

URBAN SANITARY DISTRICT.	MEDICAL OFFICER OF HEALTH.	AREA in acres (Land and Water).	POPULATION.				Estimated Population middle of 1929.	BIRTHS.	DEATHS.	Annual Rates per 1,000 of Estimated Population.							Infantile Death Rate per 1,000 Births
			Census. 1911	Census. 1921	Ratio 1921 to 1911 Percent- age.	Corrected Population 1921.				Birth Rate.	Death Rate.	Zymotic Death Rate.	Death Rate from continued Fever and Diarrhoeal Diseases (under 2 years)	Phthisis Death Rate.	Respiratory Death Rate.		
ALFRETON ... ..	S. O. Bingham, M.R.C.S....	4,626	19,046	20,472	108	20,800	21,630	362	219	16·73	10·12	·23	·04	·37	1·29	66·3	
ALVASTON AND BOULTON ... ..	C. F. Druitt, M.R.C.S., L.R.C.P.	1,321	1,398	1,620	115	1,632	2,313	46	28	19·89	12·10	·86	...	·43	1·29	21·7	
ASHBOURNE... ..	E. A. Sadler, M.D. ...	573	4,059	4,144	102	4,166	4,504	74	46	16·43	10·21	·44	·22	·66	·88	40·5	
BAKEWELL ... ..	C. W. Evans, M.B. ...	3,061	3,078	3,064	99	2,964	3,159	33	29	10·45	9·17	...	...	·95	1·26	60·6	
BASLOW ... ..	T. Fentem, M.D.	5,634	858	866	101	811	845	8	9	9·46	10·65	...	...	...	1·18	...	
BELPER ... ..	R. C. Allen, M.R.C.S., D.P.H.	3,183	11,640	12,324	104	12,330	13,050	219	122	16·78	9·34	·30	·15	·61	·61	68·5	
BOLSOVER ... ..	W. Stratton, L.R.C.P.I.	4,955	11,214	11,475	102	11,700	12,750	251	106	19·68	8·31	·86	·15	·23	1·33	67·7	
BONSALL ... ..	C. W. Sparks, M.R.C.S., L.R.C.P.	2,447	1,248	1,167	94	1,170	1,195	14	4	11·71	3·34	...	...	...	...	71·4	
BRAMPTON AND WALTON ... ..	R. A. McCrea, M.B.	9,000	2,059	2,316	112	2,323	2,255	36	27	15·96	11·97	...	...	·44	1·77	...	
BUXTON (Borough)... ..	T. B. Flint, M.R.C.S.	3,101	13,760	15,641	114	14,790	17,030	229	172	13·44	10·10	·17	·05	·58	·82	65·5	
CHESTERFIELD (Borough) ... ..	J. A. Stirling, M.B., D.P.H.	8,474	55,309	61,232	111	62,400	65,270	1,156	691	17·70	10·58	·53	·09	·52	1·33	69·2	
CLAY CROSS ... ..	N. K. Sparrow, L.R.C.P.I.	1,467	8,365	8,686	104	8,840	8,727	162	107	18·56	12·25	·57	·23	·46	1·48	55·5	
DRONFIELD ... ..	O. H. Hudson, M.R.C.S.	1,045	3,943	4,434	112	4,448	4,503	70	66	15·54	14·65	...	...	1·11	1·77	28·5	
GLOSSOP (Borough)... ..	E. H. M. Milligan, M.D., D.P.H.	3,052	21,688	20,531	95	20,870	19,720	245	253	12·42	12·83	·30	·20	·50	1·47	77·5	
HEAGE... ..	R. C. Allen, M.R.C.S., D.P.H.	2,367	3,474	3,740	107	3,801	4,403	85	40	19·30	9·08	·45	·22	·69	·82	59·8	
HEANOR ... ..	W. H. Turton, M.B.	3,509	19,851	21,436	108	21,870	23,050	418	222	18·13	9·63	·30	·04	·39	1·38	62·3	
ILKESTON (Borough) ... ..	H. L. Barker, M.D., M.R.C.S., D.P.H.	2,526	31,657	32,266	102	32,980	33,260	674	340	20·26	10·22	·12	·12	·81	·89	60·5	
LONG EATON ... ..	J. Moir, M.B.	3,323	19,207	19,489	102	20,499	22,240	314	212	14·11	9·53	·13	·09	·81	·89	60·5	
MATLOCKS ... ..	H. Fleming, M.B.	7,001	10,343	10,545	102	9,555	9,714	147	131	15·13	13·48	·51	...	·51	1·74	61·2	
NEW MILLS ... ..	G. B. Pemberton, M.B., D.P.H.	5,204	8,998	8,490	94	8,590	8,967	121	107	13·49	11·93	...	...	·11	1·11	57·8	
NORTH DARLEY ... ..	C. R. Wills, M.B.	5,142	3,317	3,264	98	3,219	4,196	65	39	15·49	9·29	·48	...	·48	·95	30·7	
RIPLEY ... ..	R. A. Ryan, L.R.C.P.I.	2,815	11,848	13,292	112	13,560	13,940	192	115	13·77	8·24	·07	...	·07	·50	88·5	
SOUTH DARLEY ... ..	J. L. Fletcher, M.B.	2,008	809	740	91	731	674	13	7	19·28	10·39	...	...	...	1·48	...	
SWADLINCOTE ... ..	S. T. Cochrane, M.D., D.P.H.	3,670	18,674	20,012	107	20,140	21,090	362	205	17·16	9·71	·14	·04	·61	·99	77·3	
WIRKSWORTH ... ..	W. S. G. Christie, M.B., Ch.B.	3,027	3,888	3,610	93	3,606	3,915	72	63	13·39	16·09	·76	·25	·51	1·78	69·4	
TOTAL ... ..		92,531	289,731	304,856	105	308,095	322,400	5,368	3,360	16·65	10·42	·32	·09	·50	1·17	65·3	





# COUNTY OF DERBY.

Year ending December 31st, 1930.

Table IIa.

Table giving the Birth Rates and the Death Rates from several causes, in each of the RURAL Sanitary Districts of the County.

RURAL SANITARY DISTRICT.	MEDICAL OFFICER OF HEALTH.	AREA in Acres (Land and Water).	POPULATION.					BIRTHS.	DEATHS.	ANNUAL RATES PER 1,000 OF ESTIMATED POPULATION.							Infantile Death Rate per 1,000 Births.
			Census 1911.	Census 1921.	Ratio 1921 to 1911 Percentage	Corrected Population 1921.	Estimated Pop'lotion to middle of 1929.			Birth Rate.	Death Rate.	Zymotic Death Rate.	Death Rate from con- tinued Fevers and Diarrheal Diseases (under 2 yrs.	Phthisis Death Rate.	Respiratory Death Rate.		
ASHBOURNE ... ..	H. H. Hollick, M.R.C.S. ... ..	70,380	10,294	10,367	101	10,300	10,500	156	116	14·85	11·05	·47	·09	·19	·57	89·7	
BAKEWELL ... ..	T. Fentem, M.D. ... ..	81,772	18,461	18,666	100	18,100	18,800	251	219	13·35	11·65	·10	·05	·21	·85	35·8	
BASFORD ... ..	W. H. Parkinson, M.D., D.P.H. ... ..	3,569	1,450	1,481	102	1,504	1,774	26	17	14·65	9·58	...	...	...	...	38·4	
BELPER ... ..	R. Morrison, L.R.C.P. & S. ... ..	50,166	23,586	23,494	100	23,620	25,320	409	255	16·15	10·07	·27	·07	·27	·51	36·6	
BLACKWELL ... ..	A. H. Wear, M.B., B.S., D.P.H. ... ..	21,237	39,306	41,880	107	42,450	44,670	812	383	18·18	8·57	·49	·15	·42	1·32	67·7	
CHAPEL-EN-LE-FRITH ... ..	G. Cochrane, M.B., D.P.H. ... ..	80,389	16,935	16,144	95	15,890	16,900	269	176	15·92	10·41	·12	·12	·53	1·06	40·8	
CHESTERFIELD ... ..	H. Peck, M.D., D.P.H. ... ..	68,068	71,653	76,143	106	77,000	84,710	1,609	842	18·99	9·93	·68	·14	·29	1·42	65·2	
CLOWN ... ..	W. Spencer, L.R.C.P. & S. ... ..	13,428	17,844	17,506	98	17,730	18,670	356	145	19·06	7·76	·10	·05	·64	1·07	58·9	
GLOSSOP DALE ... ..	E. H. M. Milligan, M.D., D.P.H. ... ..	17,891	4,009	3,780	94	3,810	3,846	40	45	10·40	11·70	...	...	...	1·04	25·0	
HARTSHORNE AND SEALS ... ..	R. W. Logan, M.R.C.S. ... ..	11,479	7,939	8,598	108	8,720	9,005	145	84	16·10	9·32	...	...	...	1·11	48·3	
HAYFIELD ... ..	G. B. Pemberton, M.B., D.P.H. ... ..	10,282	5,170	4,520	87	4,413	4,424	49	61	11·08	13·79	22	..	...	1·13	102·0	
NORTON ... ..	D. Green, M.B., F.R.C.S. ... ..	8,738	3,919	4,639	118	4,570	5,661	62	58	10·95	10·24	·18	...	·35	·53	32·2	
REPTON ... ..	J. A. Watt, M.B., D.P.H. ... ..	54,272	16,133	16,500	102	16,420	18,270	312	185	17·08	10·12	·11	...	·32	1·20	51·3	
SHARDLOW ... ..	S. Hunt, M.R.C.S. ... ..	41,731	30,900	33,755	109	33,501	36,830	653	369	17·73	10·02	·19	·08	·43	1·06	55·1	
SUDBURY ... ..	G. H. Herbert, M.R.C.S. ... ..	17,299	2,683	2,537	94	2,509	2,520	45	24	17·86	9·52	·39	...	·39	·39	...	
RURAL DISTRICTS ... ..		550,701	270,282	280,010	104	280,537	301,900	5,194	2,979	17·20	9·86	·36	·09	·34	1·11	57·3	
URBAN DISTRICTS ... ..		92,531	289,731	304,856	105	308,095	322,400	5,368	3,360	16·65	10·42	·32	·09	·50	1·17	65·3	
WHOLE COUNTY ... ..		643,232	560,013	584,866	104	588,632	624,300	10,562	6,339	16·92	10·15	·34	·09	·42	1·14	61·4	



of registered live and still births among males and females, shewing legitimate and illegitimate separately, are as follows :—

	<i>Legitimate.</i>		<i>Illegitimate.</i>		<i>Total.</i>	
	<i>Males.</i>	<i>Females.</i>	<i>Males.</i>	<i>Females.</i>	<i>Males.</i>	<i>Females.</i>
Live Births	5,244	4,898	228	192	5,472	5,090
Still Births	270	194	10	12	280	206

**Deaths.**—6,339 deaths occurred during the year, giving a death rate of 10·15 per thousand of the population, as compared with 11·57, the rate for the previous year.

**Zymotic Diseases.**—The Zymotic Death Rate for the year was 0·34 per thousand of the population, as compared with 0·31, the rate for the previous year. The increase is accounted for by a rise of 0·06 per thousand in the case of measles and 0·03 in the case of diphtheria. The rates for whooping cough and diarrhoea have fallen by 0·04 and 0·02 per thousand respectively.

### NURSING IN THE HOME.

**General.**—General nursing in the homes of the people is carried out over the greater part of the County through the agencies of District Nursing Associations, the majority of which are affiliated with the Derby County Nursing Association. These affiliated Associations number 80 and employ 98 nurses (30 Queen's Nurses and 68 District Nurse Midwives). I have no accurate information as to the number of Associations not affiliated to the Derby County Nursing Association.

Under Section 101 of the Local Government Act, 1929, the County Nursing Association receives a Grant of £1,400 per annum for the financial year ended March, 1931. The County Council are under an obligation to pay this Grant till the end of the financial year 1933. The Grant is made with a recommendation that the County Nursing Association should allocate the money partly towards the administrative expenses of the County Nursing Association, partly for the training of midwives and providing post-graduate courses for them, and for the greater part as Grants to District Nursing Associations providing midwifery and maternity services, the object of the Grant being to assist in the maintenance of a midwife in districts where normally it would not be possible for a midwife to exist in private practice, such for instance as in sparsely populated agricultural rural areas.

The County Council has arrangements with the Derby County Nursing Association for the nursing of bedridden cases of tuberculosis in their own homes. During the year 1930, this service was provided in eight instances.

**Midwives.**—During 1930, eleven midwives received subsidies ranging from £15 to £40 per annum. On December 31st, 1930, the number of subsidised midwives had fallen to six consequent upon death and change of circumstances.

The total number of midwives practising in the area at the end of 1930 was 334. Further particulars of the midwifery service is given under the heading of Maternity and Child Welfare, on page 57 of this Report.

The general policy in granting subsidies to midwives is that a subsidy is given only to midwives practising in a rural area where, owing to the sparcity of the population, it would be difficult for her to make an adequate living apart from the subsidy. Subsidies have also been given for a limited period in exceptional circumstances to help a midwife to become established during the early period of her practice.

### HEALTH EDUCATION.

**HEALTH WEEK.**—The special activities during Health Week are carried out under the auspices of the Derbyshire Health Week Committee, whose Secretary, Mr. A. J. Cash, reports as follows :—

Health Week for Derbyshire was held from October 5th to 11th, 1930, in conjunction with National Health Week. The Derbyshire Health Week Committee is comprised of representatives of practically all voluntary organisations, as well as of representatives of the Derbyshire Education Committee, the County Council and the Boroughs, Urban and Rural District Councils throughout the County.

During Health Week, special addresses were given in the Elementary and Secondary Schools in the County by the teaching staff, supplemented by the services of 111 Doctors and Health Visitors. In addition, about 25,000 children from 180 schools attended Picture Houses where Health Films were shewn.

The exhibitions included Dental Films, many of which were explained by the Senior Dental Officer of the County Council. Essay competitions were held for the school children, for which 66 schools entered, and 1,800 papers were submitted by scholars on "Dental Hygiene," whilst another essay competition on "Self help in Health" was initiated by the Royal Sanitary Institute.

The programme of the Derbyshire Federation of Women's Institutes included a Lecturer from the British Red Cross Society, who made a fortnight's tour and visited 18 of the Branches and in 26 other Centres addresses were given by Doctors, Nurses, or Health Visitors.

Special attention was also given to the production of clean milk as outlined by the County Organiser, Mr. J. R. Bond.

Two lectures on "The Preservation of Health" were given by the County Medical Officer of Health at Belper and Heanor, the lectures being very well attended and distinctly successful. Other lecturers during the period included Dr. Saleeby, of London.



Films and Lantern Slides were shewn in Picture Houses in the evenings, and a considerable quantity of literature, obtained gratuitously from National Societies, was distributed to the Day Schools, the Child Welfare Centres, and the Women's Institutes of the County.

### POOR LAW MEDICAL OUT-RELIEF.

As specifically requested by Circular 1119 of the Ministry of Health, I set out below the Medical Out-Relief Districts, together with the populations :—

#### SOUTH-WESTERN GUARDIANS' COMMITTEE AREA.

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 1 ...	Castle Gresley ...	1492	Dr. S. T. Cochrane, Swadlincote, Burton-on-Trent.
	Church Gresley ...	9628	
	Linton ...	1191	
	Stanton & Newhall ...	5992	
	Swadlincote ...	4392	
		22695	
		<hr/>	
No. 2 ...	Bretby ...	352	Dr. E. V. Lindsey, Repton, Near Derby.
	Findern ...	381	
	Foremark ...	49	
	Ingleby ...	98	
	Newton Solney ...	433	
	Repton ...	1929	
	Twyford & Stenson ...	164	
	Willington ...	631	
		4037	
		<hr/>	
No. 3 ...	Catton ...	91	Dr. C. Thompson, Rosliston Road, Stapenhill, Burton-on-Trent.
	Walton-on-Trent ...	340	
	Cauldwell ...	132	
	Coton-in-the-Elms ...	471	
	Drakelow ...	115	
	Lullington ...	208	
	Rosliston ...	467	
		1824	
		<hr/>	

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 4	Ash ...	126	Dr. A. Ramsay, The Grove, Etwall, Nr. Derby.
	Bearwardcote ...	36	
	Burnaston ...	204	
	Dalbury Lees ...	172	
	Egginton ...	430	
	Etwall ...	721	
	Hilton ...	809	
	Mickleover ...	2573	
	Osliston & Thurstaston	278	
	Radbourne ...	187	
	Sutton-on-the-Hill ...	106	
	Trusley ...	98	
		5740	
No. 5	Barton Blount ...	54	Dr. J. N. Gale, Tutbury, Burton-on-Trent.
	Church Broughton ...	429	
	Foston & Seropton ...	692	
	Hatton ...	926	
	Hoon ...	40	
	Marston-on-Dove ...	75	
		2216	
No. 6	Boundary ...	61	Dr. W. G. Love, Moira Rd., Woodville, Nr. Burton-on-Trent.
	Hartshorne ...	1515	
	Woodville ...	3146	
		4722	
No. 7	Calke ...	55	Dr. R. R. W. Logan, Ashby-de-la-Zouch.
	Smisby ...	343	
	Tieknall ...	761	
	Overseal ...	2083	
	Netherseal ...	684	
		3926	
No. 8	Boylestone ...	199	Dr. P. Crerar, Sudbury, Nr. Derby.
	Somersal Herbert ...	70	
	Sudbury ...	486	
	Doveridge ...	749	
		1504	
No. 9	Cubley ...	277	Dr. K. V. Smith, South View, Rocester, Staffs.
	Marston Montgomery	391	
	Norbury & Roston ...	365	
		1033	

**MID-DERBYSHIRE GUARDIANS' COMMITTEE AREA.**

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 1 ...	Alfreton (Part) South Wingfield ...	... ... 1605	Dr. A. K. P. Corkery, High St., Alfreton.
No. 2 ...	Belper ... Heage ... Kilburn ... Holbrook ... Shottle & Postern ...	... 12324 ... 3740 ... 1802 ... 1191 ... 378	Dr. R. C. Allen, Bridge Street, Belper.
		<hr/> 19435 <hr/>	
No. 3 ...	Ripley ... Alfreton (Swanwick Ward) Pentrich ...	... 13292 ... ... 269	Dr. R. A. Ryan, Scarsdale House, Ripley.
No. 4 ...	Alfreton (Part)		Dr. W. A. Warters, Greenhill Lane, Riddings, Nr. Alfreton
No. 5 ...	Wirksworth ... Ashleyhay ... Alderwasley ... Idridgehay ...	... 3610 ... 169 ... 295 ... 332	Dr. W. S. G. Christie, West End, Wirksworth.
		<hr/> 4406 <hr/>	
No. 6 ...	Crich ... Dethick, Lea and Holloway ...	... 3056 ... 1159	Dr. E. M. M. Macdonald, Crich, Nr. Matlock.
		<hr/> 4215 <hr/>	
No. 7 ...	Hazelwood ... Turnditch ... Windley ... Milford ... Duffield ... Weston Underwood Ravensdale Park ... Kedleston ... Quarndon ...	... 361 ... 268 ... 201 ... 1150 ... 2200 ... 358 ... 39 ... 79 ... 417	Dr. R. Morrison, Duffield, Nr. Derby.
		<hr/> 5073 <hr/>	



District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 8 ...	Allestree ...	602	Dr. N. M. Leys, Brailsford, Nr. Derby.
	Kirk Langley ...	493	
	Mackworth ...	223	
	Markeaton ...	186	
	Darley Abbey ...	858	
		<hr/> 2362 <hr/> <hr/>	
No. 9 ...	Denby ...	1843	Dr. F. R. Howse, "Dunadea," Horsley Woodhouse, Nr. Derby.
	Horsley ...	389	
	Horsley Woodhouse	1435	
	Mapperley ...	426	
	Morley ...	322	
	Smalley ...	1388	
		<hr/> 5803 <hr/> <hr/>	
No. 10 ...	Ashbourne ...	4144	Dr. A. E. Sadler, The Mansion, Ashbourne.
	Atlow ...	117	
	Bentley, Fenny ...	156	
	Biggin ...	98	
	Bradley ...	214	
	Clifton ...	580	
	Edlaston & Wyaston	196	
	Hulland ...	209	
	Hulland Ward ...	339	
	Hulland Ward Intakes	28	
	Kniveton ...	260	
	Lea Hall ...	27	
	Mappleton ...	194	
	Newton Grange ...	84	
	Offcote & Underwood	307	
	Osmaston ...	227	
	Snelston ...	276	
	Sturston ...	186	
	Thorpe ...	196	
	Tissington ...	285	
	Yeaveley ...	185	
	Yeldersley ...	227	
		<hr/> 8535 <hr/> <hr/>	

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer
No. 11 ...	Alkington ...	69	Dr. N. M. Leys, Brailsford, Nr. Derby.
	Bentley, Hungry ...	64	
	Brailsford ...	672	
	Hollington ...	150	
	Longford ...	304	
	Mercaston ...	90	
	Rodsley ...	114	
	Shirley ...	233	
		<hr/> 1696 <hr/>	
No. 12 ...	Bonsall ...	1167	Dr. E. D. Broster, The Gables, Wirksworth.
	Brassington ...	602	
	Callow ...	77	
	Carsington ...	193	
	Hognaston ...	242	
	Hopton ...	86	
	Ible ...	43	
	Kirk Ireton ...	421	
	Middleton ...	911	
		<hr/> 3742 <hr/>	
No. 13 ...	Ballidon ...	92	Dr. D. S. Twigg, Hartington, Buxton.
	Bradbourne ...	133	
	Eaton & Alsop ...	125	
	Hartington Town Qr.	461	
	Do. Nether Qr.	367	
	Parwich ...	527	
		<hr/> 1705 <hr/>	

#### **SOUTH-EASTERN GUARDIANS' COMMITTEE AREA.**

No. 1 ...	Ilkeston ...	32266	Dr. W. R. Paton, "The Uplands," Burr Lane, Ilkeston.
	Shipley ...	630	
		<hr/> 32896 <hr/>	
No. 2 ...	Heanor ...	16442	Dr. W. C. Robey, The Old Manor House, Eastwood, Notts.
No. 3 ...	Codnor & Loscoe ...	4994	Dr. Geo. Thomson, Fettercairn House, Codnor, Derbys.

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 4 ...	Codnor Park ...	851	Dr. J. Heffron, Ironville, Nr. Nottingham.
No. 5 ...	Alvaston & Boulton ...	1620	Dr. C. F. Druitt, London Road, Alvaston.
No. 6 ...	Breadsall ...	520	Dr. R. Morrison,
	Little Eaton ...	1179	Duffield, Nr. Derby.
		<u>1699</u>	
No. 7 ...	Breaston ...	1356	Dr. C. H. Latham,
	Sawley ...	3469	New Sawley, Long Eaton.
	New Sawley (part of Long Eaton)		
No. 8 ...	Long Eaton (excluding New Sawley)		Dr. J. P. Denny, Long Eaton.
No. 9 ...	Arleston & Sinfin ...	45	Dr. S. C. Clarke,
	Littleover ...	1702	Cleveland House, Pear Tree Rd., Derby.
	Sinfin Moor ...	55	
		<u>1802</u>	
No. 10 ...	Barrow ...	240	Dr. A. W. P. Haine,
	Chellaston ...	820	Melbourne.
	Derby Hills ...	42	
	Melbourne ...	3467	
	Stanton-by-Bridge ...	116	
	Swarkestone ...	155	
		<u>4840</u>	
No. 11 ...	Risley ...	281	Dr. C. S. Vartan,
	Sandiacre ...	3852	Sandiacre, Nr. Nottingham
	Stanton-by-Dale ...	672	
		<u>4805</u>	
No. 12 ...	Aston-on-Trent ...	493	Dr. H. C. Bell,
	Elvaston ...	469	Shardlow, Nr. Derby.
	Shardlow ...	994	
	Weston-on-Trent ...	394	
		<u>2350</u>	

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 13 ...	Chaddesden ...	... 560	Dr. J. W. Smith, Borrowash, Nr. Derby.
	Dale Abbey ...	... 395	
	Draycott ...	... 2454	
	Hopwell ...	... 77	
	Kirk Hallam ...	... 83	
	Ockbrook .....	... 2969	
	Stanley ...	... 1401	
	Spondon ...	... 3132	
	West Hallam ...	... 980	
		12051	

### SCARSDALE GUARDIANS' COMMITTEE AREA.

No. 1 ...	Beighton ...	... 5497	Dr. J. Fairbrother, Beighton, Nr. Chesterfield.
No. 2 ...	Eckington ...	... 12624	Dr. G. S. Sinclair, Southgate House, Eckington, Sheffield.
No. 3 ...	Killamarsh ...	... 4849	Dr. G. R. Lipp, Killamarsh, Nr. Chesterfield.
No. 4 ...	Staveley ...	... 12646	Dr. R. B. N. Smartt, Barrow Hill, Chesterfield.
No. 5 ...	Brampton ...	... 1938	Dr. R. A. McCrea, Brampton, Chesterfield.
	Walton ...	... 378	
		2316	
No. 6 ...	Chesterfield (part), comprising :—		
	West Ward ...	... 4094	Dr. T. R. Evans, Clarence Road, Chesterfield.
	Holmesbrook Ward...	137	
	Trinity Ward ...	5838	
	Central Ward ...	6400	
	St. Helen's Ward ...	3520	
	St. Leonard's Ward	5670	
	Rother Ward (part)		
No. 7 ...	Rother Ward (part)		Dr. W. Moyers, Hasland Green, Chesterfield.
	Hasland Ward (part)		
	Hasland ...	...	
	Tupton ...	... 2034	
	Wingerworth ...	... 390	

District.	Parishes.	Populat' n 1921.	Name and Address of District Medical Officer.
No. 8 ...	Ashover ...	2432	Dr. P. C. Prince, Ashover, Nr. Chesterfield.
No. 9 ...	Brackenfield...	321	Dr. H. W. Pooler, Stonebroom, Nr. Chesterfield.
	Norton ...	1211	
	Shirland & Higham...	4188	
	Wessington ...	704	
		<u>6424</u>	
No. 10 ...	Clay Lane ...	7853	Dr. T. F. Wilson, Clay Cross, Chesterfield.
	Egston ...	833	
	Stretton ...	641	
	Woodthorpe ...	223	
		<u>9550</u>	
No. 11 ...	Barlow ...	964	Dr. J. T. Wilson, Dronfield, Nr. Sheffield.
	Coal Aston ...	710	
	Dronfield ...	4434	
	Dronfield Woodhouse	902	
	Holmesfield ...	493	
	Unstone ...	2434	
		<u>9937</u>	
No. 12 ...	Brimington ...	5559	Dr. P. F. MacGinnis, Brimington, Chesterfield.
	Calow ...	1277	
		<u>6836</u>	
No. 13 ...	Newbold Ward ...	4522	Dr. L. E. Sutcliffe, Whittington Moor, Chesterfield.
	Old Whittington Ward	5053	
	New do. ...	3951	
	Moor Ward ...	6021	
		<u>19547</u>	
No. 14 ...	Bolsover ...	11475	Dr. J. D. Gordon, Bolsover, Nr. Chesterfield.
No. 15 ...	Heath ...	2281	Dr. J. Graham, Holmwood, Nr. Chesterfield.
	Nth. Wingfield (part)		
	Sutton-cum-		
	Duckmanton ...	1551	
	Temple Normanton...	753	

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 16 ...	Pilsley ... Nth. Wingfield (part)	2885	Dr. J. Alexander, Pilsley, Nr. Chesterfield.
No. 17 ...	Barlborough... Clown ...	2021 5880 7901	Dr. O. P. H. O'Keefe, Clown, Chesterfield.
No. 18 ...	Elmton & Creswell ...	5360	Dr. G. K. Wood, 85, Elmton Road, Creswell, Mansfield.
No. 19 ...	Whitwell ...	4245	Dr. W. W. J. Lawson, Whitwell, Mansfield.
No. 20 ...	Ault Hucknall ... Tibshelf & Newton ...	2025 4053 6078	Dr. N. F. Graham, Tibshelf, Alfreton.
No. 21 ...	Pinxton ... South Normanton ... Blackwell (except Newton) ...	5348 6996 5073 17417	Dr. S. T. Halpin, South Normanton, Nr. Alfreton.
No. 22 ...	Glapwell ... Pleasley ...	94 2510 2604	Dr. C. J. Palmer, Mansfield Woodhouse.
No. 23 ...	Shirebrook ... Upper Langwith ...	11309 1030 12339	Dr. F. Daly, Shirebrook, Mansfield.
No. 24 ...	Scarcliffe ...	3442	Dr. W. Stratton, Bolsover, Chesterfield.
No. 25 ...	Dore ... Totley ...	1341	Dr. Chas. O'Connor Parsons, Totley Brook Rd., Totley.
No. 26 ...	Norton ... Beauchief ...	1481 31 1512	Dr. Douglas Green, 2, Camping Lane, Sheffield.

**HIGH PEAK GUARDIANS' COMMITTEE AREA.**

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 1 ...	Burbage ...	1700	Dr. G. Cochrane, " Turnsteads," Burlington Rd., Buxton.
	Buxton ...	7009	
	Fairfield ...	6932	
	Green Fairfield ...	345	
	Hartington U. Qr. ...	1595	
	King Sterndale ...	166	
		17747	
No. 2 ...	Chapel-en-le-Frith ...	5283	Dr. D. Cogan, High St., Chapel-en-le-Frith.
	Chinley, etc. ...	1968	
	Fernilee ...	1535	
	Peak Forest ...	420	
	Wormhill ...	1505	
		10711	
No. 3 ...	Aston ...	79	Dr. J. W. W. Baillie, Peveril House, Castleton.
	Bamford ...	999	
	Brough & Shatton ...	81	
	Castleton ...	646	
	Derwent ...	174	
	Edale... ...	435	
	Hope ...	657	
	Hope Woodlands ...	149	
	Thornhill ...	107	
		3327	
No. 4 ...	Ashford ...	695	Dr. T. Fentem, Bakewell.
	Bakewell ...	3064	
	Brushfield ...	32	
	Haddon, Nether ...	21	
	Haddon, Over ...	213	
	Hassop ...	115	
	Longstone, Great ...	470	
	Longstone, Little ...	167	
	Pilsley ...	187	
	Rowland ...	42	
	Rowsley ...	338	
	Sheldon ...	124	
		5468	



District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 5	Aldwarke	42	Dr. J. L. Fletcher, Winster, Matlock.
	Birchover	97	
	Elton	379	
	Grange Mill	24	
	Gratton	25	
	Harthill	64	
	Middleton-by- Youlgreave	240	
	Stanton	796	
	Wensley	740	
	Winster	684	
	Youlgreave	1214	
		<hr/> 4305 <hr/>	
No. 6	Bradwell	1325	Dr. G. P. Lafferty, Nether Cottage, Bradwell, Sheffield.
	Little Hucklow	127	
		<hr/> 1452 <hr/>	
No. 7	Cromford	904	Dr. C. W. Sparks. Dale House, Matlock Bath.
	Matlock Bath	1823	
		<hr/> 2727 <hr/>	
No. 8	Darley Dale	3264	Dr. Edward Crarer, Matlock.
	Matlock	7060	
	Tansley	758	
		<hr/> 11082 <hr/>	
No. 9	Tideswell	1972	Dr. K. K. B. Quanbrough, Tideswell, Buxton.
	Blackwell	59	
	Grindlow	45	
	Great Hucklow	219	
	Litton	870	
	Taddington	384	
	Wardlow	124	
	Wheston	46	
		<hr/> 3719 <hr/>	
No. 10	Chelmorton	342	Dr. J. A. Hendry, 1, Broad Walk, Buxton.
	Flagg	217	
	Hartington Middle Qr.	405	
	Monyash	350	
		<hr/> 1314 <hr/>	

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 11 ...	Baslow ...	866	Dr. R. S. C. Edleston, Baslow.
	Beeley ...	317	
	Calver ...	404	
	Chatsworth ...	50	
	Curbar ...	329	
	Endsor ...	206	
	Froggatt ...	133	
	Nether Padley ...	165	
	Stoney Middleton ...	532	
	Stoke ...	56	
		3058	
No. 12 ...	Abney ...	56	Dr. W. E. Houlbrook, Hathersage.
	Eyam ...	1175	
	Eyam Woodlands ...	519	
	Foolow ...	136	
	Hathersage ...	1694	
	Hazlebadge ...	47	
	Highlow ...	52	
	Offerton ...	15	
	Outseats ...	326	
		4020	

### NORTH-WESTERN GUARDIANS' COMMITTEE AREA.

District.	Parishes.	Populat'n 1921.	Name and Address of District Medical Officer.
No. 1 ...	Glossop (part)	14401	Dr. N. Hadfield, Hollinross Lane, Glossop.
No. 2 ...	Glossop (part)	8223	Dr. R. W. Bollans, Station Road, Hadfield.
	Charlesworth		
	Chisworth ...		
No. 3 ...	Ludworth ...	1684	Dr. A. G. Hastings, Overdale, Station Road, Marple, Nr. Stockport.
No. 4 ...	Hayfield ...	2644	Dr. G. B. Pemberton, Red Gate. New Mills Via Stockport.
	Mellor ...	1876	
	New Mills ...	6877	
	Newton ...	1613	
		13010	

There has been no change of note in the administration of this service since its transfer to the County Council. The districts mentioned in the foregoing Table are generally speaking the same as those before the change-over, except where the Guardians' districts overlapped the County boundary, in which case the districts have been formed so as to be in every case included within the County boundary.

### **BACTERIOLOGICAL LABORATORY FACILITIES.**

The Bacteriological Laboratory established by the Derbyshire County Council in 1909 is intended to give facilities to Medical Practitioners, Medical Officers of Health, and Veterinary Surgeons practising in the County, for the examination of specimens coming within the province of the Public Health.

It is needless to emphasize the importance of bacteriological methods of diagnosis, but experience in the past has shewn that in certain districts this is not fully realised. Every Medical Officer of Health has to "inquire into and ascertain by such means as are at his disposal the causes, origin and distribution of diseases within the district," and "inform himself as far as practicable respecting all influences affecting or threatening to affect injuriously the public health," and bacteriological investigation forms an important means of doing this.

The majority of Medical Practitioners already possess outfits for collecting the more common specimens, but if any Practitioner has not the outfits he desires, they are supplied on application. When a specimen is received at the County Laboratory for examination, a new outfit to replace the one used is forwarded to the sender.

The Laboratory is open on weekdays from 9 a.m. to 5 p.m., and on Saturdays and public holidays from 9 a.m. to 12 noon. It is open for a short time on Sunday mornings for the examination of urgent specimens only, but it is well to remember that there is no postal delivery on Sundays, and specimens lying in the post over the week-end may give erroneous results. Swabs from diphtheria contacts or from convalescent hospital cases should not be sent in at the week-end.

The results of examinations, as a rule, are sent out the same day as the specimen is received, except in the case of specimens requiring cultivation or other prolonged procedure. Diphtheria results are reported on the day following the receipt of the swabs.

A specimen from a suspected case of diphtheria is reported as positive only when Klebs-Loeffler Bacilli are found. The presence or absence of other organisms, such as Hofmann's Bacilli, Vincent's Bacilli, Streptococci, etc., is reported only when desired. Organisms from chronic carriers are tested for virulence by animal inoculation.

The method of reporting is in all cases by Certificate, but where early knowledge of the result is important a preliminary telephone

message is sent as, for instance, in the case of primary positive results of notifiable infectious disease. Copies of the laboratory certificates relating to positive specimens of notifiable disease are sent to the Medical Officers of Health of the districts in which the patients reside.

The following Table gives a list of the various examinations undertaken in the Laboratory, together with the scale of charges :—

TABLE III.—Examinations undertaken in County Laboratory and Scale of Charges.			
		<i>In County.</i>	<i>Outside County.</i>
A.	Cultural exam. of fæces, blood, urine, etc. (for notifiable diseases)	Free	7/6d.
B.	" " " (for non-notifiable diseases)	7/6d.	7/6d.
C.	Microscopical exam. of urine, vomit, sputum, etc., for organised deposit	2/6d.	2/6d.
D.	General exam. of urine, including albumin, pus, sugar and other deposits	5/-	5/-
E.	Differential Leucocyte Count	7/6d.	10/6d.
F.	Enumeration of red and white corpuscles	7/6d.	10/6d.
G.	Estimation of hæmoglobin	5/-	7/6d.
H.	Report including E. F. and G.	15/-	7/6d.
I.	Estimation of blood sugar. Single estimation	5/-	£1/1/0d.
J.	" " " Set of four estimates	10/-	5/-
K.	" " urea. (Ambard's test)	5/-	10/-
L.	Urea concentration test	5/-	5/-
M.	Bacteriological examination of water	£1/1/0d.	£1/1/0d.
N.	Inoculation test for tubercle bacilli in urine, sputum, etc.	10/-	10/-
O.	" " " milk	7/6	12/6d.
P.	Bacterial Count and B. Coli content in milk, etc.	5/-	5/-
Q.	Autogenous Vaccines	£2/2/0d.	£2/2/0d.
R.	Swabs for diphtheria bacilli and Vincent's Angina	Free	2/6d.
S.	Virulence test for diphtheria bacilli	10/-	£1/10/0
T.	Sputum, urine, cerebro-spinal and pleural fluids, etc., for tubercle bacilli	Free	2/6d.
U.	Bacteriological examination of blood and lochia in puerperal fever	Free	7/6d.
V.	Agglutination tests with Typhoid, Para-typhoid and Salmonella groups	Free	7/6d.
W.	" " Dysentery groups	Free	7/6d.
X.	Cerebro-spinal fluid and post-nasal swabs for meningococci	Free	7/6d.
Y.	Hairs for ringworm	Free	1/-
VENEREAL DISEASES.			
	Blood and cerebro-spinal fluid for Wassermann reaction test...	...	AS PER MINISTRY OF HEALTH SCALE.
	Pus for Gonococci	...	Free 3/6d.
	Serum for Spirochaetes	...	Free 3/6d.
	Cerebro-spinal fluid for cytological and chemical examination	...	Free 5/-

During the year, 16,989 bacteriological examinations were made at the County Laboratory, compared with 12,700 in the previous year. The following Table shows the origin of the specimens :—

TABLE IV.

Medical Practitioners	...	...	...	...	...	4,721
School Medical Staff	...	...	...	...	...	1,018
Dispensary Staff	...	...	...	...	...	1,316
Hospitals (Isolation and others)	...	...	...	...	...	4,954
Venereal Diseases	...	...	...	...	...	2,646
Hairs for Ringworm	...	...	...	...	...	108
Examinations under Superannuation Act	...	...	...	...	...	90

## Local Authorities :—

Milk Inoculations. Tuberculosis Order.	...	...	402
Milk Inoculations. Ordinary Routine Samples	...	...	295
Milk for Bacterial Count and Bacillus Coli	...	...	343
Milk, Direct Examinations. Tuberculosis Order	...	...	275

## Outside Authorities :—

Milk Inoculations. Derby Borough	...	...	86
Milk for Bacterial Count and Bacillus Coli. Derby Borough	...	...	160
Miscellaneous. Derby City Hospital	...	...	215
Examinations for which a fee is paid	...	...	186
Miscellaneous. Derby Borough	...	...	174
Total	...	...	16,989

The number of specimens sent in by Medical Practitioners from the Urban Districts was 9·06 per thousand of the population, and in the Rural Districts it was 5·96, the figure for the whole County being 7·56 per thousand of the population.



TABLE V.—Bacteriological Specimens Examined.

Districts.	Population.	No. of Specimens sent.	Rate per 1,000.
URBAN.			
Alfreton .. ..	21,630	99	4.57
Alvaston & Boulton .. ..	2,313	80	34.59
Ashbourne .. ..	4,504	27	5.99
Bakewell .. ..	3,159	41	12.98
Baslow .. ..	345	2	2.36
Belper .. ..	13,050	67	5.13
Bolsover .. ..	12,750	71	5.56
Bonsall .. ..	1,195	8	6.69
Brampton & Walton .. ..	2 255	14	6.20
Buxton (Boro') .. ..	17,030	305	17.90
Chesterfield (Boro') .. ..	65,270	631	9.66
Clay Cross .. ..	8,727	60	6.87
Dronfield .. ..	4,503	20	4.44
Glossop (Boro') .. ..	19,720	607	30.78
Heage .. ..	4,403	15	3.40
Heanor .. ..	23,050	116	5.03
Ilkeston (Boro') .. ..	33,260	121	3.63
Long Eaton .. ..	22,240	133	5.98
Matlocks .. ..	9,714	64	6.58
New Mills .. ..	8,967	46	5.13
North Darley .. ..	4,196	12	2.86
Ripley .. ..	13,940	19	1.36
South Darley .. ..	674	1	1.48
Swadlincote .. ..	21,090	117	5.54
Wirksworth .. ..	3,915	245	62.57
<i>Urban Districts</i> .. ..	322,400	2,921	9.06
RURAL.			
Ashbourne .. ..	10,500	73	6.95
Bakewell .. ..	18,800	109	5.79
Basford .. ..	1,774	2	1.12
Belper .. ..	25,320	202	7.97
Blackwell .. ..	44,670	333	7.45
Chapel-en-le-Frith .. ..	16,900	64	3.78
Chesterfield .. ..	84,710	302	3.56
Clowne .. ..	18,670	83	4.44
Glossop Dale .. ..	3,846	12	3.12
Hartshorne & Seals .. ..	9,005	39	4.33
Hayfield .. ..	4,424	34	7.68
Norton .. ..	5,661	10	1.76
Repton .. ..	18,270	162	8.86
Shardlow .. ..	36,830	354	9.61
Sudbury .. ..	2,520	21	8.33
<i>Rural Districts</i> .. ..	301,900	1,800	5.96
<i>Urban Districts</i> .. ..	322,400	2,921	9.06
WHOLE COUNTY .. ..	624,300	4,721	7.56

TABLE VI.—Specimens received from Medical Practitioners during 1930.

Districts.	Enteric Fever.		Diphtheria.		Phthisis.		Miscellaneous		Total	
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
<b>URBAN.</b>										
Alfreton .. ..	..	12	1	11	3	38	18	16	22	77
Alvaston & Boulton ..	..	..	11	54	1	14	..	..	12	68
Ashbourne .. ..	2	3	..	8	3	9	1	1	6	21
Bakewell .. ..	..	5	2	12	2	12	5	3	9	32
Baslow .. ..	..	..	..	..	..	2	..	..	..	2
Belper .. ..	..	7	3	14	6	35	2	..	11	56
Bolsover .. ..	1	6	..	19	4	24	11	6	16	55
Bonsall .. ..	..	..	..	8	..	..	..	..	..	8
Brampton & Walton ..	..	4	1	7	..	1	1	..	2	12
Buxton (Boro') .. ..	..	4	66	207	4	17	1	6	71	234
Chesterfield (Boro') ..	3	19	54	383	28	95	25	24	110	521
Clay Cross .. ..	..	1	13	23	2	18	1	2	16	44
Dronfield .. ..	..	4	4	9	1	1	..	1	5	15
Glossop (Boro') .. ..	1	6	32	543	5	17	3	..	41	566
Heage .. ..	..	..	..	5	3	7	..	..	3	12
Heanor .. ..	2	14	1	11	8	36	22	22	33	83
Ilkeston (Boro') .. ..	..	2	7	22	8	46	23	13	38	83
Long Eaton .. ..	1	3	2	43	15	65	1	3	19	114
Matlock .. ..	..	..	8	45	1	7	2	1	11	53
New Mills .. ..	..	4	1	30	..	9	..	2	1	45
North Darley .. ..	..	..	2	7	..	3	..	..	2	10
Ripley .. ..	..	..	..	1	2	12	2	2	4	15
South Darley .. ..	..	..	..	1	..	..	..	..	..	1
Swadlincote .. ..	1	6	12	32	5	52	4	5	22	95
Wirksworth .. ..	..	6	60	135	1	11	18	14	79	166
<i>Urban Districts</i>	11	106	280	1630	102	531	140	121	533	2388
<b>RURAL.</b>										
Ashbourne .. ..	2	1	10	25	2	23	5	5	19	54
Bakewell .. ..	4	13	8	34	7	20	14	9	33	76
Basford .. ..	..	..	..	..	..	1	1	..	1	1
Belper .. ..	..	8	13	85	5	44	19	28	37	165
Blackwell .. ..	3	8	21	143	15	113	21	9	60	273
Chapel-en-le-Frith ..	..	..	..	27	2	24	6	5	8	56
Chesterfield .. ..	2	29	25	101	13	106	15	11	55	247
Clowne .. ..	..	..	5	36	8	34	..	..	13	70
Glossop Dale .. ..	..	4	..	4	..	3	1	..	1	11
Hartshorne & Seals ..	..	..	1	15	2	19	1	1	4	35
Hayfield .. ..	..	4	1	13	2	12	1	1	4	30
Norton .. ..	..	4	..	1	..	5	..	..	..	10
Repton .. ..	2	14	7	56	2	24	17	40	28	134
Shardlow .. ..	1	1	63	179	6	75	17	12	87	267
Sudbury .. ..	..	..	2	19	..	..	..	..	2	19
<i>Rural Districts</i> ..	14	86	156	738	64	503	118	121	352	1448
<i>Urban Districts</i> ..	11	106	280	1630	102	531	140	121	533	2388
<i>Whole County</i> ..	25	192	436	2368	166	1034	258	242	885	3836

TABLE VII.—Specimens received from Hospitals, 1930.

Hospital.	Enteric Fever.		Diphtheria.		Phthisis.		Miscel- laneous.		Total.	
	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Belper .. ..	..	2	102	933	..	..	..	..	102	935
Buxton .. ..	..	..	80	264	..	..	..	..	80	264
North Derbyshire Royal Hospital..	5	36	..	..	..	..	..	6	5	42
Draycott .. ..	..	..	42	160	..	..	..	..	42	160
Dronfield .. ..	..	..	21	115	..	..	1	..	22	115
Etwall .. ..	..	..	10	87	..	..	..	4	10	91
Gamesley .. ..	..	..	6	64	..	..	1	5	7	69
High Peak .. ..	..	..	11	70	..	..	..	..	11	70
Haddon .. ..	..	..	39	171	..	..	1	..	40	171
Ilkeston Sanatorium..	..	..	1	9	..	..	..	..	1	9
Langwith .. ..	..	..	2	40	..	..	..	..	2	40
Mastin Moor .. ..	..	..	38	215	..	..	..	..	38	215
Morton .. ..	..	3	91	1298	..	..	7	5	98	1306
Penmore .. ..	1	3	153	845	..	..	..	7	154	855
Totals .. ..	6	44	596	4271	..	..	10	27	312	4342

## Venereal Diseases Specimens.

TABLE VIII.

The following Table shows the number of specimens sent in under the V.D. Scheme for Examination during the year 1930 :—

Blood for Wassermann reaction .	...	...	...	2,223
Pus for Gonococci	...	...	...	412
Serum for Spirochætes	...	...	...	7
Cerebro-Spinal Fluid for Cell Count	...	...	...	3
do. do. Globulin	...	...	...	1
Total	...	...	...	2,646

TABLE IX.

The following Table shows the number of Specimens received from the Dispensaries and Sanatoria during 1930 :—

Dispensary or Institution.	Sputa.		Miscellaneous.		Total.
	Pos.	Neg.	Pos.	Neg.	
Ashbourne .. ..	5	22	4	2	33
Burton-on-Trent ..	11	144	10	..	165
Chesterfield .. ..	47	100	1	4	152
Chinley .. ..	17	75	3	9	104
Derby .. ..	41	160	6	3	210
Glossop .. ..	13	57	6	7	83
Ilkeston .. ..	30	181	14	1	226
Long Eaton .. ..	16	94	5	..	115
Matlocks .. ..	21	71	5	10	107
Penmore Pavilion ..	40	3	..	..	43
Derbyshire Sanatorium	..	1	18	17	36
Bretby Hall .. ..	..	..	11	15	26
Whitworth Hospital ..	8	4	2	2	16
Totals .. ..	249	912	85	70	1316

TABLE X.

**School Specimens.**—The following is a list of the School Specimens received during the year 1930.

			Pos.		Neg.
Swabs for Diphtheria	..	..	26	..	710
Hair for Ringworm	..	..	131	..	94
Miscellaneous	..	..	21	..	36
			178		840
<hr/>					
Total	..	..	1018		

### Tubercle in Milk.

During the year 783 samples of milk were examined for the presence of tubercle bacilli by animal inoculation. 91 samples, or 11.62 per cent. were found to contain tubercle bacilli. The 783 samples included 86 from Derby Borough.

During 1930, 249 samples of milk were submitted for bacterial count. Of this number 224 came within the limits of Grade "A" milk.

The following Table gives details of the examinations :—

TABLE XI.

### Limit of Bacterial Content for Grade "A" Milk.

	Up to 10,000.	Over 10,000 and up to 20,000.	Over 20,000 and up to 50,000.	Over 50,000 and up to 100,000.	Over 100,000 and up to 200,000.	Over 200,000 and up to 1,000,000.	Over 1,000,000.	Unconnt- able.
No. of Tests (Total 249)	76	42	55	29	22	16	7	2
Highest Bacterial Count	10,000	20,000	50,000	98,000	198,000	880,000	4,380,000	—
Lowest Bacterial Count	Nil	11,000	20,250	52,000	102,000	203,000	1,120,000	—
Average Bacterial Count	4,870	14,922	31,990	73,027	135,563	420,346	2,147,428	—

### MILK EXAMINED FOR BACILLUS COLI.

<i>Dilution.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>	<i>Percentage with B. Coli</i>
0.01 c.c. ...	67	187	254	26

*Grade "A" Milk must be produced and treated under such conditions that a sample taken at any time before delivery to the consumer shall not contain more than 200,000 bacteria per c.c., nor any B. Coli in  $\frac{1}{100}$  c.c.*



## HOSPITALS.

Section 14 of the Local Government Act, 1929, extends the meaning of "Local Authority" for the purposes of Section 131 of the Public Health Act 1875 and Section 64 of the Public Health Act, 1925, to include County Councils. Section 131 of the 1875 Act gives power to Local Authorities to provide hospitals for the treatment of the sick. They may build such hospitals, contract for the use of any such hospital, or enter into an agreement with the managing body of a hospital for the reception of the sick on payment of an agreed sum. Further, Section 16 of the Local Government Act, 1929, gives powers to Local Authorities to recover the cost of treatment, other than the treatment of infectious diseases, which include tuberculosis and venereal diseases. The Public Health Act, 1925, extends the powers under Section 131 of the Public Health Act, 1875, to include power to make a reasonable subscription or donation to a Voluntary Hospital or Institution if the Local Authority are satisfied that by doing so they will maintain or extend or increase the hospital accommodation for the sick inhabitants of their district.

**General Hospitals.**—In my Annual Report for 1929 I dealt at some length with the position as to institutional accommodation in Derbyshire, and inserted in that Report a map shewing the relative positions of existing institutions and the types of those institutions. I would refer readers who require further detail to that Report, for here it is my intention not to deal with the subject of hospitals further than to give, as required by the Ministry of Health, the present position in this County as it is known to me. In doing so, I would like to record my appreciation of the courtesy I have received from Voluntary Hospitals in providing me with any information I have required.

I pointed out in my 1929 Report that the County is well provided with hospital accommodation, but that there were too many instances of small centres of population possessing two, three, or sometimes more institutions for the treatment of the sick, each confining its activities to one type of case and one class of person—a state of affairs which is both wasteful in money and in personnel. I suggested as a general policy that there should be one hospital for any area, and that the work of the hospital should be as comprehensive as medical and other circumstances permit, that the hospital should receive medical, surgical, obstetric, and gynaecological cases, and should include childrens' wards, and might with advantage in many instances provide accommodation for school clinics, maternity and child welfare centres, and tuberculosis dispensaries, making the hospital a centre for both preventive and curative medicine. It was pointed out that the need for small hospitals serving small areas no longer exists in these days of easy and quick transit; moreover, small hospitals are notoriously uneconomical.

I reiterate what I said in that Report, that voluntary hospitals have fulfilled, and are fulfilling, useful functions, and that I believe





## VOLUNTARY HOSPITALS.

TABLE XII.

[illegible]

they can continue to do so provided they keep pace with modern requirements, which they will the more easily do if they are of a size attractive to a competent staff and serve a large enough area to provide material which would justify the provision of the most modern equipment.

An efficient and adequate general hospital system throughout Derbyshire is easily within the bounds of practicability, and I can only hope that nothing will tend towards setting up two hospital services—voluntary on the one hand and municipal on the other—unless those two services are run in close co-operation and avoiding unnecessary and harmful competition.

The following Table gives particulars relating to Voluntary Hospitals in the County.

#### **Other Voluntary Hospitals or Maternity Homes in the County.**

<i>Name of Hospital.</i>	<i>No. of beds.</i>
Ilkeston Maternity Home ... ..	9
Whitworth Hospital, Darley Dale ... ..	14
Heanor Maternity Home ... ..	8

#### **Hospitals outside the County Boundary, but available for Derbyshire Cases,**

Sheffield Royal Infirmary.  
 Sheffield Royal Hospital.  
 Jessop Hospital for Women, Sheffield.  
 Mansfield District Hospital.  
 St. Mary's Hospital, Manchester.  
 Royal Infirmary, Manchester.  
 Stockport Infirmary.  
 Burton-on-Trent General Infirmary.



ISOLATION HOSPITAL ACCOMMODATION. TABLE XIII. (continued).

Authority.	Hospital.	Situation.	Districts served.	Population served. (estimated 1929).	Type of Ambulance.	Accommodation.			No. of beds on 144 sq. ft. basis.
						Ward Blocks.	Wards.	Beds.	
Repton Joint Hospital Committee ...	Repton	Etwell	Repton R. Sudbury R. Ashbourne R. (certain Parishes).	23,652	Motor.	2	4	36	19
Ilkeston Hospital Committee ...	Ilkeston	Little Hallam	Ilkeston B.	33,260	Motor.	2	4	25	10
Buxton Corporation ...	Buxton	Ashwood Dale	Buxton B.	17,030	Horse.	2	8	28	12
Glossop Corporation ...	Gamesley	Gamesley	Glossop B.	19,720	Horse	3	6	26	15
Haddon Joint Hospital Committee ...	Haddon	Haddon	Bakewell U. Baslow U. Bonsall U. Matlocks U. N. Darley U. S. Darley U. Bakewell R.	38,583	Motor	2	4	37	16 + 4†
Heanor U.D.C. ...	Heanor	Calladine House *	Heanor U.	23,050	Horse.	1	3	14	7

\* This hospital is at times used for Smallpox, at which times it is cleared of all other cases.

† Four cases can be accommodated in an upstairs room, which could be used in an emergency.



TABLE XIII (continued)

## SMALLPOX HOSPITAL ACCOMMODATION.

<i>Authority.</i>	<i>Name of Hospital.</i>	<i>Situation.</i>	<i>Districts served.</i>	<i>Population served.</i>	<i>Accommodation.</i>		
					<i>No. of Ward Blocks.</i>	<i>No. of Wards.</i>	<i>No. of beds on 144 sq. ft. basis.</i>
Belper Joint Hospital Committee ...	Belper	Heage	Alfreton U. Belper U. Heage U. Ripley U. Wirksworth U. Belper R.	82,258	1	3	16
Chesterfield Joint Hospital Committee ...	Spital	Spital	Brampton & Walton U. Bolsover U. Chesterfield Boro' Clay Cross U. Dronfield U. Blackwell R. Chesterfield R. Clown R. Norton R.	247,216	3	5	40
Glossop Town Council ...	Gamesley	Gamesley	Glossop Boro'	19,720	3	5	15
Ashbourne Joint Hospital Board ...	Bradley Wood	Bradley Wood	Ashbourne U. Ashbourne R. Mayfield R.	15,127	3	3	7

SMALLPOX HOSPITAL ACCOMMODATION.

TABLE XIII (continued).

Authority	Name of Hospital.	Situation.	Districts served.	Population served.	Accommodation.			No. of beds on 144 sq. ft. basis.
					No. of Ward Blocks.	No. of Wards.		
Haddon Joint Hospital Committee	Water Grove	Water Grove, Foolow, nr. Eyam	Bakewell U. Baslow U. Bonsall U. Matlocks U. N. Darley U. S. Darley U. Bakewell R.	38,583	1	2	6	
Heanor Urban District Council	Calladine House	Heanor	Heanor U.	23,050	1	3	14	
High Peak Joint Hospital Committee	High Peak	Chinley	New Mills U. Chapel R. Glossop Dale R. Hayfield R.	34,137	1	2	6	
Long Eaton Urban District Council	Meadow Lane	Long Eaton	Alvaston and Bolton U. Long Eaton U. Shardlow R.	61,383	2	6	9	
Repton Joint Hospital Committee	Etwall	Etwall	Ashbourne R. (certain Parishes) Repton R. Sudbury R.	23,652	1	2	6	
Swadlincote Urban District Council	Swadlincote	Hearthcote Road	Swadlincote U.	21,090	2	4	19	

None of the isolation hospitals has a resident medical staff. Noticeably the following areas are either unprovided for or inadequately provided for :—  
 Swadlincote Urban District.  
 Certain parishes in Ashbourne Rural District.  
 Ilkeston Borough.  
 Heanor Urban District.  
 Hartshorne and Seals Rural District.

**TABLE XIV.—Cases of Infectious Diseases notified within the following Hospital Districts and removed to Hospital.**

**North Derbyshire Hospital District.**

DISTRICT.	Estimated Population, 1920.	SMALL- POX.		SCARLET FEVER.		DIPHTH- ERIA.		ENTERIC FEVER.		TOTALS.	
		No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.
Bolsover U. ...	12750	4	4	56	50	2	2	2	2	64	58
Clay Cross U. ...	8727	57	57	43	33	16	11	—	—	116	101
Dronfield U. ...	4503	—	—	10	10	2	2	—	—	12	12
Blackwell R. ...	44670	2	2	342	274	57	51	1	1	402	328
Chesterfield R. ...	84710	7	7	260	177	283	253	5	1	555	438
Clowne R. ...	18670	—	—	104	95	13	12	—	—	117	107
Norton R. ...	5661	—	—	15	8	3	3	1	1	19	12
TOTALS ...	179691	70	70	830	647	376	334	9	5	1285	1056

**Chesterfield Hospital District.**

Brampton and Walton U. ...	2255	—	—	2	1	1	—	—	—	3	1
Chesterfield (Boro') ...	65270	10	10	263	195	168	143	4	3	445	351
TOTALS ...	67525	10	10	265	196	169	143	4	3	448	352

**Belper Hospital District.**

Alfreton U....	21630	42	41	91	31	23	15	2	1	158	88
Belper U. ...	13050	—	—	34	31	4	4	—	—	38	35
Heage U. ...	4403	1	1	3	3	1	1	—	—	5	5
Ripley U. ...	13940	—	—	10	2	8	3	—	—	18	5
Wirksworth U. ...	3915	—	—	10	10	63	59	—	—	73	69
Belper R. ...	25320	—	—	63	54	21	20	1	1	85	75
TOTALS ...	82258	43	42	211	131	120	102	3	2	377	277

**Ilkeston Hospital District.**

Ilkeston Boro' ...	33260	1	1	100	70	11	8	—	—	112	79
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**Shardlow Hospital District.**

Alvaston and Boulton U. ...	2313	—	—	12	7	14	5	—	—	26	12
Long Eaton U. ...	22240	1	1	118	100	6	5	—	—	125	106
Shardlow R. ...	36830	1	1	142	87	59	42	—	—	202	130
TOTALS ...	61383	2	2	272	194	79	52	—	—	353	248

TABLE XV.

## STATISTICAL INFORMATION RELATING TO ISOLATION HOSPITAL COMMITTEES APPLYING FOR A GRANT.

Year ended March 31st, 1930.

Name of Hospital.	Belper.	Penmore.	Dronfield.	Mastin Moor.	Morton.	Langwith.	High Peak	Shardlow.	Repton.	Ilkeston.	Haddon.											
Total Number of Beds in Hospital ... ..	83	59	34	35	33	37	46	50	36	25	37											
Number of beds on which Grant is estimated ... ..	18	30	18	18	18	24	14	18	10	10	16											
Population of Hospital District 1929... ..	82,258	67,525	179,691				30,291	61,383	23,652	33,260	38,583											
Cases Admitted during year ended March 31st, 1930 :—																						
Smallpox ... ..	169	—	—	—	119	—	—	—	—	—	—											
Scarlet Fever ... ..	191	138	199	166	246	219	59	181	105	74	103											
Diphtheria ... ..	65	189	50	57	122	49	18	32	25	2	14											
Typhoid Fever ... ..	1	3	2	—	1	—	2	—	—	—	—											
Other Diseases ... ..	1	21	—	—	—	—	1	—	—	3	1											
TOTAL ... ..	427	351	251	223	488	268	80	213	130	79	118											
Average number of patients in Hospital each day ... ..	45·0	30·75	21·0	27·0	27·0	22·0	10·0	13·0	11·9	6·6	12·7											
Permanent Staff residing in Hospital ... ..	12	18	10	11	16	9	9	20	6	6	11											
Non-resident Staff in addition to Clerk and Doctor ... ..	3	4	1	1	2	1	3	1	2	1	2											
Average number of days each case in Hospital ... ..	29·3	30·25	34·0	46·0	22·0	34·0	46·0	—	32·4	29·9	40·0											
SUMMARY OF EXPENDITURE :—																						
	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.	Cost.	Average Cost per patient per week.
	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.
1. Provisions ... ..	983	8 5	784	9 10	360	6 6	424	6 0	533	7 6	505	8 10	477	18 4	843	1 4 11	292	9 5	244	14 2	405	12 3
2. Drugs and Medical Appliances ... ..	94	10	250	3 1	114	2 1	113	1 7	111	1 7	113	2 0	28	1 1	128	3 10	51	1 8	18	1 1	34	1 0
3. Furniture, Linen, &c. ... ..	455	3 11	585	7 4	277	5 0	213	3 0	226	3 2	357	6 3	297	11 5	1,178*	1 14 10	200	6 6	65	3 9	512	15 6
4. Fuel ... ..	423	3 7	674	8 5	125	2 3	151	2 2	138	1 11	116	2 0	336	12 11	369	10 11	130	4 2	180	10 6	255	7 9
5. Salaries ... ..	1,494	12 10	1,728	1 1 7	780	14 1	794	11 4	959	13 7	807	14 1	1,093	2 2 1	1,233	1 16 6	570	18 5	581	1 13 10	957	1 9 0
6. Administration ... ..	275	2 4	299	3 9	201	3 7	270	3 10	307	4 4	221	3 10	254	9 9	408	12 1	193	6 3	130	7 7	177	5 4
7. Renewals and Repairs ... ..	163	1 5	—	—	46	10	339	4 10	97	1 5	355	6 3	145	5 7	75	2 3	1,215	1 19 3	67	3 11	2	1
8. Loans—Repayment and Interest ... ..	14	1	856	10 9	368	6 7	375	5 4	457	6 5	131	2 3	189	7 3	1,121†	1 13 2	387	12 6	—	—	1,013	1 10 8
9. Transport ... ..	148	1 3	387	4 10	362	6 6	34	6	29	5	26	6	61	2 4	37	1 1	28	11	63	3 8	—	—
10. Miscellaneous ... ..	27	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	6	19	7
TOTALS ... ..	4,076	1 14 11	5,563	3 9 7	2,633	2 7 5	2,713	1 18 7	2,857	2 0 4	2,631	2 6 0	2,880	5 10 9	5,392	7 19 7	3,066	4 19 1	1,357	3 19 0	3,374	5 2 2
Provisions (Patients and Staff) per head per week ... ..	6 7	6 2	4 5	4 3	4 9	6 3	9 7	9 9	6 3	7 5	6 6											
Name of Medical Superintendent ... ..	R. C. Allen	J. A. Stirling.	H. Peck				N. Kennedy	C. H. Latham	John A. Watt	H. L. Barker.	T. Fentem.											
Name of Clerk ... ..	G. Pym	J. L. Feather.	W. E. Wakerley				W. B. Bunting	J. Spencer	H. S. Askew	E. Godfrey.	A. Hawes.											
Grant due in accordance with Reports of Council, April 17th, 1907, and July 7th, 1920.	300 0 0	480 0 0	1,200 0 0				234 0 0	292 10 0	180 0 0	144 18 0	285 1 0											

\* Includes new washing machine and hydro-extractor.

† Includes final repayment of old buildings and first repayment of new cubicle block, etc.

W. M. ASH.  
JOHN HUNT.



# STATISTICAL INFORMATION

## Table of Hospitals

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## Table of Expenditure

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**Repton Hospital District.**

DISTRICT.	Estimated Population. 1929.	SMALL- POX.		SCARLET FEVER.		DIPHTH- ERIA		ENTERIC FEVER.		TOTALS.	
		No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.	No. notified.	Removed to Hospital.
Ashbourne R. (certain Parishes)	2862	—	—	13	9	9	5	—	—	22	14
Repton R. ...	18270	—	—	84	59	16	9	2	2	102	70
Sudbury R. ...	2520	—	—	10	9	5	1	—	—	15	10
TOTALS ...	23652	—	—	107	77	30	15	2	2	139	94

**Haddon Hospital District.**

Bakewell U. ...	3159	—	—	5	5	1	1	—	—	6	6
Baslow U. ...	845	—	—	3	3	—	—	—	—	3	3
Bonsall U. ...	1195	—	—	—	—	1	1	—	—	1	1
Matlocks U. ...	9714	—	—	4	4	27	23	—	—	31	27
North Darley U. ...	4196	—	—	9	4	7	2	—	—	16	6
South Darley U. ...	674	—	—	—	—	—	—	—	—	—	—
Bakewell R. ...	18800	—	—	30	27	10	10	2	1	42	38
TOTALS ...	38583	—	—	51	43	46	37	2	1	99	81

**High Peak Hospital District.**

New Mills U. ...	8967	—	—	11	10	1	1	—	—	12	11
Chapel R. ...	16900	—	—	35	31	10	10	—	—	45	41
Glossop Dale R. ...	3846	—	—	2	—	—	—	—	—	2	—
Hayfield R. ...	4424	—	—	11	7	1	1	—	—	12	8
TOTALS ...	34137	—	—	59	48	12	12	—	—	71	60

**Buxton Hospital District.**

Buxton (Boro') ...	17030	—	—	109	102	75	75	—	—	184	177
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With regard to isolation hospital accommodation, the Local Government Act, 1929 (Section 63) makes it obligatory for the County Council to survey the existing accommodation for the treatment of infectious diseases within or partly within the County. In my Report for 1929, I dealt at some length with the question of isolation hospitals. I pointed out that small isolation hospitals were uneconomical to run, and that the existing isolation hospitals in this County are too many in number and too small in size.

Isolation hospital accommodation in this County was settled some thirty years ago when there were no facilities for easy and quick transit; to-day there are such facilities, and I reiterate

what I said in my 1929 Report—that it is unnecessary for isolation hospitals to be so situated as to be easily available for visitors; in fact, it is detrimental; nevertheless, the proposals recently placed before the Local Authorities in this County by the County Council provided that in all cases there should be a hospital within a reasonable distance, taking into consideration the transport facilities now available.

I do not intend here to add much to what I said on the question of isolation hospital accommodation in my last Annual Report. Since that Report, however, the County Council has, in compliance with the Local Government Act, 1929, convened meetings with the Local Authorities throughout the County to consult with them in the preparation of a scheme for the proper provision of isolation hospital accommodation for submission to the Ministry of Health. The County Council, having completed the necessary survey, drew up a provisional scheme and submitted it to the various Authorities at these meetings. Briefly, the County Council's scheme comprises—

- (a) A diminution in the number and an increase in the size of the remaining isolation hospitals;
- (b) Provision for the interchange of nursing staff between areas in cases of emergency;
- (c) Provision for the admission of patients in cases of emergency to a hospital of an area other than that in which the patient resides;
- (d) Accommodation for the various types of infectious disease requiring isolation, such as encephalitis lethargica, erysipelas, cerebro-spinal fever, etc.;
- (e) Existing areas together with areas unprovided for, to be grouped into three isolation hospital areas;
- (f) A small Joint Supervising Committee to be set up to supervise the interchange of accommodation and staff of the isolation hospital committees and any other matters of common interest.

There seemed to be a somewhat common misapprehension that the County Council had set out, from pure acquisitiveness of their own free will and accord, to take from existing administering bodies the control of isolation hospitals, whereas a glance at Section 63 of the Local Government Act, 1929, would have prevented any such misapprehension, for that Section places the County Council under an obligation to carry out a survey, to consult with the Local Authorities, and to report to the Ministry of Health.

The general principles of the County Council's scheme appeared to be generally acceptable, but when it came to deciding as to which hospitals should be closed, it became immediately apparent that the majority of the Local Authorities required to qualify their acceptance of the scheme by a proviso that there should be no question of closing their own particular hospital or hospitals.

The fact remains, however, that the present isolation hospital system in this County does not meet modern requirements. It does not uniformly attract an efficient staff—it does not cover the whole County; it does not uniformly adopt the precautionary measures of immunisation of staff against diphtheria and scarlet fever. In fact, it is unusual to find that these precautions are taken.

Of the multiplicity of notifiable diseases, it is general for the hospitals in this County to accept only two, namely, diphtheria and scarlet fever—in some cases typhoid is also accepted. I have received frequent complaints from the practitioners in the County that they are unable to procure admission of cases of sporadic infectious disease to the isolation hospitals. Generally speaking, there is no provision for the proper nursing of measles; there is inadequate accommodation for the treatment of typhoid, not to speak of such conditions as erysipelas, cerebro-spinal fever, encephalitis lethargica, dysentery, polio-myelitis.

The provision for the isolation of smallpox in this County is lamentable, and it is no exaggeration to say that many of the smallpox hospitals are not reasonably fit for human habitation. One recognises that smallpox is, or should be, a disease which is rarely amongst us, but the County Council's scheme had provided, without any additional building, adequate hospital accommodation for this disease by means of a small and a large unit in each of the three proposed areas, either for the accommodation of a few scattered cases in each of the three areas or for more extensive epidemics, respectively. The first type of outbreak would be dealt with in a small unit attached for administration to existing isolation hospitals, but at some little distance from the main buildings, where the staff is immediately available; but, should the outbreak increase to epidemic proportions, the intention was to use the large unit, which would consist of one of the hospitals no longer required for ordinary isolation purposes. In inter-smallpox epidemic periods the three larger hospitals would be used for other County purposes for which accommodation is urgently required at the present time, the users being under an obligation to clear the hospital within a specified time should an extensive epidemic of smallpox arise. This system has been found workable elsewhere.

I repeat that the present system for the provision of isolation hospital accommodation in this County, both in the case of general infectious diseases and in the case of smallpox, is ineffective, and requires remodelling on modern lines, taking advantage of modern transport facilities and adopting methods which the advancement of knowledge has shown to be desirable.

#### MATERNITY HOMES.

The County Council have provided Maternity Homes at Ashbourne and Ripley, and have contracted with the Chesterfield

Corporation for the use of four beds at the Chesterfield Maternity Home and with the Nightingale Home, Derby, for the use of two beds, with the Women's Hospital, Derby, and with the Wirksworth Cottage Hospital.

**Ashbourne.**—During the year 1930, 125 cases were admitted to this maternity home. Of these, 122 were delivered by midwives and three by doctors.

During the financial year ended March 31st, 1931, the number of patients admitted to this Home was 137, the percentage of beds occupied being 60·3. The gross cost during the year was £1,692 (including £558 for repayment of loan and interest and other Capital Charges). The sum of £672 was received as fees from patients, leaving a net cost to the County Council of £1,020.

**Ripley.**—During 1930, 180 patients were admitted to this Home. Of these, 140 were delivered by midwives and 40 by doctors.

During the financial year ended March 31st, 1931, the number of admission to this Home was 162, the percentage of beds occupied being 80·3. The gross cost during the year was £1,224 (including £76 for Capital Charges). The sum of £759 was received as fees from patients, leaving a net cost to the County Council of £465.

**Chesterfield.**—During 1930, 160 cases were admitted from the County area, of whom 59 were normal cases paying the full fee.

**Nightingale Home.**—During 1930, 3 cases were admitted to this Home from the County area, under the Agreement between the County Council and the Authorities of the Home.

With the exception of the Nightingale Home, each of the above-mentioned Maternity Homes provides accommodation for unmarried mothers, but for the first confinement only. For subsequent confinements the unmarried mother can be provided with accommodation at most of the Poor Law Institutions, nearly all of which provide adequate accommodation for maternity cases.

**Women's Hospital, Derby.**—During 1929, the County Council entered into an agreement with this Hospital for the accommodation of difficult obstetric cases requiring specialist treatment. Financial responsibility for these cases is undertaken by the County Council only on the recommendation of their own specialist officer.

**Wirksworth Cottage Hospital.**—An agreement has been reached between this Hospital and the County Council for the attendance by the staff of the Hospital on maternity cases both in the Hospital



and in the surrounding district. During the year ended March 31, 1931, 40 cases were admitted to the hospital and 14 were treated in the district. Of the 40 cases in hospital, 7 were delivered by doctors and 33 by midwives; of the other 14, 5 were delivered by doctors and 9 by midwives. The cost to the County Council was £27.

### Public Assistance Institutions.

Each of the eight County Council Public Assistance Institutions provide maternity beds, but, as I stated in my Report for 1929, little use is made of this accommodation, although in some instances it is quite good.

The following Table shews the number of beds at each of the Public Assistance Institutions and the number of cases accommodated in them during 1930 :—

<i>Institution.</i>	<i>Beds.</i>	<i>Cases admitted.</i>	<i>Average stay.</i>	<i>Cases delivered.</i>		<i>Occasions Medical Aid sought.</i>
				<i>Drs.</i>	<i>Midwives.</i>	
Ashbourne ... ..	2	1	18 days	—	1	—
Bakewell ... ..	3	20	10 „	4	12	6
Belper ... ..	4	6	21 „	2	4	2
Chapel-en-le-Frith	3	3	14 „	1	2	1
Chesterfield ... ..	26	51	14 „	2	49	12
Glossop ... ..	3	1	14 „	1	—	—
Hayfield ... ..	2	4	21 „	3	1	—
Shardlow ... ..	6	16	21 „	8	8	—
TOTALS ... ..	49	102	—	21	77	21

As an instance of the overlapping of institutions, Ashbourne is worthy of note, for whilst the County Council are maintaining maternity beds in their Home, which is by no means fully occupied, they are also now maintaining a maternity ward at their Public Assistance Institution, which has during the year accommodated but one case, and would therefore appear to be unnecessary.

Another instance worthy of notice is Chesterfield, where the County Council are maintaining 26 beds in their Public Assistance Institution, having accommodated only 51 cases in the year, yet for the accommodation of maternity cases in that same area, a sum of no less than £1,061 was expended during the year at the Chesterfield Maternity Home. Admittedly the types of Institutions are different, but it is the intention of the Act that there should no longer be one service for the pauper and one for the non-pauper.



# VENEREAL DISEASES HOSPITALS AND CLINICS.

The County Council maintain Venereal Diseases Clinics at the Chesterfield and North Derbyshire Royal Hospital and the Derbyshire Royal Infirmary, Derby. The number of beds provided for in-patient treatment of the disease at these two Institutions is as follows :—

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Chesterfield & North Derbyshire			
Royal Hospital ... ..	1	1	2
Derbyshire Royal Infirmary ...	2	2	4

Clinics are held at these Institutions at the following times :—

TABLE XVI.

## VENEREAL DISEASES CLINICS.

	<i>Males.</i>	<i>Females.</i>
Chesterfield & North	Tuesdays,	Tuesdays,
Derbyshire Royal Hospital	4.30 to 6.30	2 to 4.
	Fridays,	Fridays,
	2.30 to 4.30	11 to 12.30
Derbyshire Royal Infirmary,	Mondays,	Mondays,
London Road, Derby	6 to 8.	3 to 5.
	Wednesdays,	Thursdays,
	6 to 8.	6 to 8.
	Saturdays,	
	2 to 4.	

The following Tables show the extent to which the scheme is utilised.

The number of new cases attending the Venereal Diseases Centres during the year 1930, and the diseases for which they required treatment are as follows :—

TABLE XVII.

<i>Disease.</i>	<i>Burton.</i>	<i>Chester- field.</i>	<i>Derby.</i>	<i>Notting- ham.</i>	<i>Stock- port.</i>	<i>Total.</i>
Syphilis	5	37	38	21	4	<b>105</b>
Gonorrhœa	6	135	139	61	6	<b>347</b>
Soft Chancre	1	2	4	1	1	<b>9</b>
<b>Total</b>	<b>12</b>	<b>174</b>	<b>181</b>	<b>83</b>	<b>11</b>	<b>461</b>

The details of the cost of the scheme are as follows :—

TABLE XVIII.

<i>Treatment—</i>							£
Out-Patients ... ..	...	...	...	...	...	...	2570
In-Patients ... ..	...	...	...	...	...	...	125
Salvarsan Substitutes, Drugs, etc. ...	...	...	...	...	...	...	380
Travelling Expenses—Doctor ... ..	...	...	...	...	...	...	36
„ „ Patients ... ..	...	...	...	...	...	...	54
Printing, Postages, etc. ... ..	...	...	...	...	...	...	18
<i>Other Services—</i>							
Propaganda ... ..	...	...	...	...	...	...	93
Pathological Examinations ... ..	...	...	...	...	...	...	637
Gross cost ... ..						...	3913
Receipts for Pathological work done for other							
Authorities ... ..	...	...	...	...	...	...	316
Nett cost ... ..						...	£3597

The cost per attendance, including both in-patients and out-patients, at Chesterfield, Derby, and Nottingham worked out as follows :—

	s. d.	
Chesterfield ... ..	2	0
Derby ... ..	2	11
Nottingham ... ..	1	11

The General Practitioners submitted 1,613 specimens, details of which are as follows :—

TABLE XIX.

	<i>Spirochætes.</i>		<i>Wassermanns</i>			<i>Gonococci.</i>		Other Examinations	
	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>	<i>Doubt'l</i>	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>
Derbyshire } Derby Borough } Burton-on-Trent }	—	—	165	1092	39	62	253	—	2

During 1930 the number of specimens submitted by the General Practitioners was 1,613, whilst in 1929, 1928, 1927, 1926 and 1925, the numbers of specimens submitted were respectively 1,629, 1,545, 1,423, 1,480 and 1,174.

Sixteen medical practitioners possessing the necessary qualification and experience, are entitled to receive free supplies of salvarsan and salvarsan substitutes for use within the County. These drugs are kept at the Central Office and issued as required. During the year 1930 a total of 237 doses were supplied as follows :—

<i>Doses.</i>	Novarseno- billon.	Metarseno- billon.	Myosal- varsan.	Sulfar- senol.	TOTAL.
0·02 gm.	—	—	—	3	3
0·12 „	—	36	—	—	36
0·3 „	26	24	2	—	52
0·45 „	46	—	2	—	48
0·6 „	60	24	14	—	98
	—	—	—	—	—
Totals	132	84	18	3	237
	—	—	—	—	—

### TUBERCULOSIS HOSPITALS.

Four hospitals for the accommodation of cases of tuberculosis are maintained by the County Council, namely :—

1. Walton Sanatorium.
2. Penmore Pavilion.
3. Bretby Hall Orthopædic Hospital.
4. Whitworth Hospital.

At Walton Sanatorium, accommodation is provided for 124 patients, *i.e.*, 74 beds for males and 50 for females, with an additional six shelter beds for use during the summer time.

The Pavilion at Penmore provides accommodation for 14 females suffering from advanced pulmonary tuberculosis, with two additional shelter beds for use during the summer time.

Bretby Hall has 55 beds for surgical tuberculosis in children. A new Pavilion, containing 32 beds, was opened in July, 1930, for the reception of adult patients of both sexes suffering from surgical tuberculosis. The block is arranged in the form of two wings, with small central administrative quarters, each wing containing a six-bedded ward and a series of double and single bed cubicles.

The accommodation for cases of tuberculosis at Whitworth Hospital consists of a detached block of six beds, and is used for the accommodation of males suffering from advanced pulmonary tuberculosis. It stands in the grounds of the Whitworth Hospital, and was opened for the reception of tuberculosis patients on July 1st, 1929.

Further information concerning these Institutions will be found on pages 180–199 of this Report.

## HOSPITALS FOR THE CHRONIC SICK.

In my Report for 1929, I dealt at some length with the question of hospital accommodation for the chronic sick. The Public Assistance Institutions are the only Institutions generally available for chronic sick in this County. Particulars of these Institutions will be found on page 82 of this Report. I should like, however, again to refer to the problem of providing the necessary treatment for sufferers from chronic disease and protracted ill-health, which require a stay in hospital of a prolonged though not indefinite period. There are many such cases amongst young and middle-aged people whose home conditions are such that they cannot be properly accommodated there. The nature of the conditions which create chronic sickness in the aged, for which accommodation is usually provided in Public Assistance Institutions, so detracts from the amenities of the wards in these institutions as to make them unsuitable for cases of protracted illness in the young and middle-aged. It is, therefore, for the latter type of case that institutional accommodation is so urgently necessary. The existence of these cases creates hardships not only to the sufferer, but to his relatives, who are usually quite unable properly to provide for him.

## MENTAL HOSPITALS.

The County Mental Hospital, situated at Mickleover on the outskirts of Derby, consists of an extensive block of buildings, erected in 1849. It has been added to from time to time, and now contains 24 wards—12 for males, providing accommodation for 388 patients, and 12 for females, with accommodation for 382 patients. During the year 1930, an up-to-date admission block has been completed, comprising dormitories, day-rooms, private rooms for patients, solaria, continuous bathing and hydrotherapy rooms, operating theatre and anæsthetic rooms, electrical treatment and X-ray rooms, laboratory and kitchen block, the whole providing accommodation for 100 patients and 15 staff. This is probably one of the most completely equipped admission blocks in existence. During 1929, a nurses' home was opened. The new admission block and nurses' home, although contained within the same curtilage as the old Institution, are set apart from it. There are also 12 houses for the accommodation of the married staff. The whole estate comprises about 262 acres.

## MENTAL DEFICIENCY INSTITUTIONS.

The County Council have no Mental Deficiency Institution. The provision of a colony for mental defectives has been under consideration for some years, but in view of the enormous expenditure entailed in the erection of a colony sufficient to provide for the needs



of the County, the County Council shows a natural reluctance to embark on a scheme of such magnitude at a time when the main industries of this County, namely, agriculture and coal mining, are in a depressed condition. However, there is a pressing need for some form of accommodation for mental defectives in the County.

The County Council have one small block in connection with the Glossop Public Assistance Institution, certified by the Board of Control for the accommodation of nine males and twelve females, whilst the Chesterfield Public Assistance Institution is certified for the reception of one female case. This accommodation is always fully occupied. Apart from this, the County Council provide accommodation by contracting with certified institutions outside the County, in which, at the end of 1930, there were accommodated for the Council 30 males and 115 females.

### ORTHOPÆDIC HOSPITALS.

Reference to Table XII. shows the Voluntary Hospitals in the County with orthopædic departments.

The County Council has its own Orthopædic Hospital at Bretby Hall, where, in addition to orthopædic cases of a tuberculous nature, there is accommodation for 50 orthopædic cases of non-tuberculous origin.

Run in conjunction with Bretby Hall and functioning in the capacity of out-patient departments are 10 orthopædic clinics, which are under the charge of the Resident Medical Superintendent of Bretby Hall Hospital. The following Table shows the situation of each Clinic and the days and times of opening :—

TABLE XX.—**Orthopædic Clinics.**

ALFRETON.	School Clinic, Grange Street, Alfreton. Every Monday morning, 9.30 a.m. to 12.30 p.m. Every Thursday, 9.30 a.m.—12.30 p.m., 2—4 p.m. Orthopædic Surgeon attends 2nd Thursday of each month.
BAKEWELL.	Liberal Club Rooms, Bakewell. 1st and 3rd Monday, 9.30 a.m. to 12.30 p.m., 2—4 p.m. Orthopædic Surgeon attends 3rd Monday of each month.
BELPER.	School Clinic, Green Hall, Belper. 1st and 3rd Wednesday mornings, 9.30 a.m.— 12.30 p.m. Orthopædic Surgeon attends 1st Wednesday morning of each month.



- CHESTERFIELD. School Clinic, Brimington Road, Chesterfield.  
Every Wednesday, 9.30 a.m.—12.30 p.m., 2—4 p.m.  
Orthopædic Surgeon attends 4th Wednesday of each month.
- CHINLEY. School Clinic, Lower Lane, Chinley.  
2nd and 4th Monday, 9.30 a.m.—12.30 p.m., 2—4 p.m.  
Orthopædic Surgeon attends 4th Monday of each month.
- DERBY. School Clinic, Walker Lane, Derby.  
Every Friday, 9.30 a.m.—12.30 p.m., 2—4 p.m.  
Orthopædic Surgeon attends 1st Friday of each month.
- HEANOR. School Clinic, Wilmot Street, Heanor.  
Every Thursday afternoon, 2—4 p.m.  
Orthopædic Surgeon attends 3rd Thursday of each month.
- LONG EATON. School Clinic, 4, Nottingham Road, Long Eaton.  
Every Thursday morning, 9.30 a.m.—12.30 p.m.  
Orthopædic Surgeon attends 3rd Thursday morning.
- SHIREBROOK. School Clinic, Cliff House, Shirebrook.  
Every Tuesday, 9.30 a.m.—12.30 p.m., 2—4 p.m.  
Every Friday morning, 9.30 a.m.—12.30 p.m.  
Orthopædic Surgeon attends every 4th Friday morning.
- SWADLINCOTE. School Clinic, Alexandra Road, Swadlincote.  
Every Tuesday, 9.30 a.m.—12.30 p.m., 2—4 p.m.  
Orthopædic Surgeon attends every 3rd Tuesday of the month.

## EAR, NOSE AND THROAT HOSPITALS.

The voluntary hospitals with Ear, Nose and Throat Departments are indicated in Table XII.

The County Council has a full-time Ear, Nose and Throat Consultant for work required in this connection under the Education and Maternity and Child Welfare Committees. Unfortunately, the County Council's scheme does not include beds, but the work is carried out at 12 Centres, particulars of which are given in the section dealing with School Clinics and Treatment Centres.

## PUERPERAL FEVER AND PUERPERAL PYREXIA HOSPITAL ACCOMMODATION.

The County Council has made provision, under the Puerperal Fever and Puerperal Pyrexia Regulations, 1926, for the accommodation of cases of these conditions at the following institutions :—

Burton-on-Trent General Infirmary.  
Derbyshire Royal Infirmary (two beds reserved).  
Derbyshire Hospital for Women, Derby.  
Jessop Hospital for Women, Norton, nr. Sheffield.  
Victoria Hospital and Dispensary, Worksop.  
High Peak Isolation Hospital, Chinley.  
Belper Public Assistance Infirmary.

Beds are, as a general rule, available as required.

Full particulars of the County Council's scheme are given on pages 62-64.

## OPHTHALMIA NEONATORUM HOSPITAL ACCOMMODATION.

The County Council has made provision for the treatment of Ophthalmia Neonatorum at the Derbyshire Royal Infirmary, Derby. Beds are available as required for the accommodation of the mother as well as the child.

## AMBULANCE FACILITIES.

(a) FOR INFECTIOUS CASES.—Ambulances for the conveyance of patients suffering from infectious diseases are provided in connection with the isolation hospitals, as shewn in Table XIII., page 38-39. There is, in addition to those shewn in the Table referred to, a motor ambulance at the Spital Smallpox Hospital.

(b) FOR NON-INFECTIOUS AND ACCIDENT CASES.—The following Table gives the places at which ambulances are available in the County :—

TABLE XXI.

<i>Police Division.</i>	<i>Place where kept.</i>	<i>Telephone No.</i>	<i>Detailed Particulars of Ambulance.</i>
ALFRETON.	Morton.	Clay Cross	Stonebroom and Morton Red 35. Cross Ambulance is a Ford 22 H.P. 1927 model which will accommodate two stretchers.
ASHBOURNE.	Sudbury.	Sudbury 1.	Sudbury Red Cross Ambulance is a Ford make, and has accommodation for two stretchers.

<i>Police Division.</i>	<i>Place where kept.</i>	<i>Telephone No.</i>	<i>Detailed Particulars of Ambulance.</i>
BAKEWELL AND MATLOCK.	Bakewell.	Bakewell 4 or 70.	Bakewell Red Cross Ambulance is a Ford make and has accommodation for two stretchers.
	Matlock.	Matlock 1 or 7.	Matlock Red Cross Ambulance is a Ford make. It is constructed to carry one stretcher case and attendants, and has every modern convenience.
BUXTON.	Buxton.	Buxton 76.	Buxton Red Cross Ambulance is a 23 H.P. Austin, which has accommodation inside for two stretcher patients and two sitting patients in addition to the attendant. There is also room for a sitting patient beside the driver.
CHAPEL-EN-LE-FRITH.	New Mills.	New Mills 154 or 48.	New Mills Red Cross Ambulance is a 25 H.P. Daimler, 1926 model which will accommodate two stretcher cases and three sitting cases.
	Glossop.	Glossop 57.	Glossop Borough Police Ambulance is a 20 H.P. Austin, 1924 model which will accommodate two stretcher cases and four sitting cases.
CHESTERFIELD.	Chesterfield.	Chesterfield 2222.	Chesterfield Borough Police Ambulance is a 21-H.P. Wolseley and has accommodation for two stretcher cases, assistants and passengers. It is fitted with every modern convenience.
	Bolsover.	Bolsover 5.	The Bolsover Urban District Council Ambulance is a 15-H.P. Morris Commercial. It is fitted with two stretchers and has accommodation for assistant and passengers. This is a new and up-to-date ambulance.
DERBY AND BELPER.	Derby.	Derby 1.	Derby Borough Fire Station Ambulance is a 22-H.P. Ford which carries two stretcher cases.
	Derby.	Derby 967.	Red Cross Society's Ambulance kept at the Midland Drapery Company, Derby, is a 14.9 H.P. Morris Commercial which has accommodation for one stretcher patient, but could carry two in an emergency.
	Long Eaton.	Long Eaton 21.	The Long Eaton Urban District Council Ambulances are (1) 20-H.P. Armstrong Siddeley with accommodation for two stretcher cases. (2) 22-H.P. Chevrolet which has accommodation for three stretcher cases.
	Spondon.	Spondon 2200.	The British Celanese Company's Ambulance is a 22-H.P. Morris with accommodation for two stretcher cases.

<i>Police Division.</i>	<i>Place where kept.</i>	<i>Telephone No.</i>	<i>Detailed Particulars of Ambulance.</i>
ECKINGTON.	Creswell.	Creswell 8.	Creswell Red Cross Ambulance is a 25-H.P. Ford with accommodation for one stretcher case, two sitting cases and attendant.
	Worksop.	Worksop 128.	The Worksop St. John ambulances are— (1) 24-H.P. Sunbeam which will accommodate two stretcher cases or eight sitting cases and attendant. (2) 22-H.P. Studebaker with similar accommodation to No. 1.
	Sheffield.	Sheffield 23221.	Sheffield Corporation have three 21-H.P. Morris Commercial Ambulances. Each ambulance has accommodation for two stretchers, or one stretcher and four sitting cases, or eight sitting cases.
	Dronfield.	Dronfield 26 and 12.	Dronfield Urban District Council Ambulance is a 30-H.P. Hudson, with accommodation for one stretcher case and attendant or four sitting cases.
	Creswell.	Creswell 14.	Messrs. T. and A. Gilbert's Ambulance is a 23-H.P. Overland which will accommodate two lying cases and attendant or one lying and two sitting cases with attendant.
ILKESTON.	Ilkeston.	Ilkeston 161.	Ilkeston Red Cross Ambulance is a Ford make with accommodation for two stretchers.
	Ripley.		The Ripley Urban District Council Ambulance is horse drawn.
REPTON AND GRESLEY.	Swadlincote.	Swadlincote 10 or 92.	The Swadlincote Urban District Council have a horse-drawn ambulance which will accommodate four sitting and two stretcher cases.
REPTON AND GRESLEY.	Gresley.	Swadlincote 133.	Gresley Colliery Ambulance (Red Cross Society) is a 20-H.P. G.M.C. with accommodation for eight sitting and four stretcher cases.
	Burton.	Burton 1.	Burton Corporation Ambulance is an 18-H.P. Guy with accommodation for two stretcher cases and four or five sitting cases. It is equipped with all modern appliances.
RIPLEY.	Ripley.	Ripley 60.	Britain Colliery Ambulance is a 28-H.P. Buick with accommodation for two stretcher cases, and is available when not required for colliery cases.



## MATERNITY AND CHILD WELFARE.

### MIDWIVES ACTS, 1902—1926.

**Number of Midwives.**—At the end of 1930 there were 334 midwives on the County Roll. 282 were trained midwives and of these, 75 were District Nurse-Midwives.

The following changes of midwives took place during the year.

Deaths of Midwives	...	...	...	...	...	3
No. retired from practice voluntarily, whose Certificates were cancelled by the C.M.B.	...	...	...	...	...	1
No. of trained midwives who have left the County, of whom 11 were District Nurse-Midwives	...	...	...	...	...	33
No. who have done temporary duty for District nurses	...	...	...	...	...	23
No. of new Midwives enrolled	...	...	...	...	...	26

Of the 334 midwives on the County Roll, 25 are in the Borough of Chesterfield, and were taken off the County Roll on October 1st, 1930, when that Borough became a Local Supervising Authority by Order of the Ministry of Health, under Section 62(1) of the Local Government Act, 1929.

**Deaths following Child-Birth.**—During 1930, information was received concerning 42 women who died following child-birth. The causes of death were as follows:—

Puerperal Fever	...	...	...	...	14
Kidney Conditions	...	...	...	...	5
Hæmorrhage	...	...	...	...	7
Cardiac Conditions	...	...	...	...	5
Pulmonary Embolism	...	...	...	...	4
Respiratory Conditions	...	...	...	...	3
Difficult Labour	...	...	...	...	1
Various	...	...	...	...	3

Of these deaths, 19 occurred in hospitals or maternity homes, the majority having been admitted to these hospitals as complicated cases.

**Records Received.**—The following Table gives the records received, the cases of Puerperal Fever and Puerperal Pyrexia in the practice of midwives only, and all cases of Ophthalmia Neonatorum, whether in the practice of doctors or midwives, with the corresponding figures for previous years:—



	1924	1925	1926	1927	1928	1929	1930
<i>Records received—</i>							
Medical Help ...	1353	1414	1565	1575	1675	1856	1918
Still Births ..	158	178	127	126	136	160	140
Deaths of Children ..	30	32	26	36	34	46	59
Deaths of Mothers ...	3	2	2	1	2	9	7
Laying-out the Dead	21	15	14	13	21	15	22
Liability to be a source of infection	53	44	45	59	38	107	130
Notification of Artifi- cial Feeding (within 10 days) ... ..	108	85	96	73	80	84	116
<i>Puerperal Fever—</i>							
Midwives' cases ...	22	19	25	12	13	21	20
<i>Puerperal Pyrexia—</i>							
Midwives' cases	...	...	15	34	26	46	44
<i>Ophthalmia Neonatorum</i>							
ALL Cases ... ..	67	47	53	66	57	56	65

The following is an analysis of the 1,918 Medical Help records received during 1930 :—

Abortion or Miscarriage ... ..	108
Varicose Veins ... ..	8
Ante-partum Hæmorrhage ... ..	72
Discharge during Pregnancy ... ..	7
Retarded Labour ... ..	451
Abnormal Presentation ... ..	121
Retained Placenta ... ..	76
Lacerated Perinæum ... ..	413
Still Births ... ..	27
Eclampsia, Fits or Convulsions ... ..	9
Post-partum Hæmorrhage ... ..	50
Rise of Temperature ... ..	63
White Leg ... ..	2
Inflammation of the Breast... ..	8
Fits or Convulsions ... ..	3
Prolapse ... ..	6
Injuries or Malformations ... ..	29
Dangerous feebleness of child ... ..	58
Eyes, condition of ... ..	85
Skin Eruption ... ..	5
Navel ... ..	1
Miscellaneous ... ..	316
	<hr/> 1,918 <hr/>

It has been found, as a general rule throughout the Country, that since the passing of the Midwives Act, 1918 (which Act placed it as a duty upon the County Council to be financially responsible to a doctor for fees incurred when called in by a midwife under the Midwives Act) that there had been a marked increase in the number of calls for medical aid issued by midwives. An occasion occurred during the year when I found it necessary to go into this matter, and I think it of sufficient interest to place on record my findings. There has been a steady increase in the number of calls made by midwives, despite the fact that the number of births and the number of confinements attended by midwives have almost uniformly decreased since 1920. The number of calls per 100 midwives' cases have therefore increased not only persistently, but markedly, as the following Table XXII. shows.

It is difficult to say why the number of calls for medical aid has increased so markedly. It may be that the higher qualifications of the midwife of to-day enables her to detect slight deviations from the normal more readily than did her predecessor, but the chief interest is not in the cause of the number of calls, but in the effect. Now, if the maternity mortality figure is an indication—and it is the only one we have—the effect is inappreciable, as will be seen by reference to the Table on page 65, giving the mortality rates for a number of years.

TABLE XXII.

Year.	Births in whole County.	Cases attended by Midwives.	Medical Help summoned	Percentage of Medical calls.	Claims Received	Claims Paid.	Amount Paid.	Amount Received.	Net Cost.
							£ s. d.	£ s. d.	£ s. d.
1915	13,791	10,514	704	6·69	—	—	—	—	—
1916	13,109	10,139	818	8·07	—	—	—	—	—
1917	11,831	9,130	764	8·37	—	—	—	—	—
1918	12,103	9,321	793	8·51	—	—	—	—	—
1919	11,838	9,512	889	9·34	—	—	249 0 0	38 0 0	211 0 0
1920	15,572	12,222	1,250	10·20	—	—	238 0 0	84 0 0	154 0 0
1921	14,417	10,950	1,249	11·40	—	—	267 0 0	66 0 0	201 0 0
1922	13,095	10,168	1,229	12·10	202	181	325 18 0	59 2 6	266 15 6
1923	12,681	9,867	1,240	12·50	250	233	366 5 6	95 1 6	271 4 0
1924	12,615	9,199	1,353	14·70	286	265	440 0 0	212 0 0	228 0 0
1925	12,491	9,408	1,414	15·03	301	281	466 16 0	217 0 0	249 16 0
1926	11,845	8,058	1,565	19·42	518	486	758 14 3	144 11 0	614 3 3
1927	11,194	7,523	1,575	20·93	610	572	918 5 6	254 15 3	663 10 3
1928	11,112	7,892	1,675	21·22	679	642	1,012 5 9	243 1 9	769 4 0
1929	10,394	6,692	1,856	27·73	986	947	1,459 12 3	321 3 0	1,138 9 3
*1930	10,562	6,883	1,918	27·86	953	920	1,453 16 9	554 14 0	899 2 9

\*—In 1930, the Borough of Chesterfield figures are included only up to September 30th, after which date Chesterfield became a Local Supervising Authority.

N.B.—The figures on the left-hand side of the Table refer to the Calendar years ending December 31st, whilst the figures on the right-hand side refer to the financial years ending in the following March.

**Inspections made.**

Inspection Forms marked " Good "	...	650
" " " " Satisfactory "	...	81
" " " " Indifferent "	...	21
" " " " Bad "	...	5
No. of other inspections and visits	...	376
No. of Midwives out	... ..	407
Total		1,540

The system of inspection of the midwives by Regional Inspectors, inaugurated at the end of 1927, is working well. The number of inspections has increased, and the following-up of any divergence from the normal state of affairs has become much more thorough. The following Table, shewing the number of such special visits and the total number of visits to midwives yearly from 1925 bears this out :—

	1925	1926	1927	1928	1929	1930
Routine visits	951	1060	994	1003	1024	1164
Special visits...	63	94	120	121	332	376
Total visits	1014	1154	1114	1124	1356	1540

**Midwives suspended from practice for being in contact with :—**

Puerperal Fever	...	...	...	...	7
Puerperal Pyrexia	...	...	...	...	14
Pemphigus Neonatorum	...	...	...	...	1
Scarlet Fever	...	...	...	...	11
Diphtheria	...	...	...	...	3
Septic Throat	...	...	...	...	1
Measles	...	...	...	...	1
Encephalitis Lethargica	...	...	...	...	1
					39

**Special Letters of Warning.**—Eleven special letters of warning were sent to midwives in the County for breaking the rules of the Central Midwives Board.

**Puerperal Fever.**—The following table shews the number of cases of Puerperal Fever which occurred in the practice of midwives during 1930 :—

	Number of Midwives.	Number of Confinements.	Puerperal Fever Cases.	Cases per 1,000 Births.
Bona-fide Midwives	52	1086	2	1·84
Trained Midwives, including District Nurse-Midwives	282	5797	18	3·10
	334	6883	20	2·90

**Puerperal Fever and Puerperal Pyrexia.**—The following table shews the total number of cases of Puerperal Fever and Puerperal Pyrexia notified to me during the year 1930 and the case rate from each of these diseases per 1,000 births :—

	<i>Whole County.</i>		<i>M.C.W. Area.</i>	
Number of births ...	10,562		8,258	
	<i>No. of Cases.</i>		<i>Case rate per 1,000 births.</i>	
	<i>Whole County.</i>	<i>M.C.W. Area.</i>	<i>Whole County.</i>	<i>M.C.W. Area.</i>
Puerperal Fever ...	36	30	3·41	3·63
Puerperal Pyrexia	90	74	8·52	8·96

The number of cases admitted to hospitals under the County Council Puerperal Fever and Puerperal Pyrexia Scheme during 1930 was as follows :—

Derbyshire Royal Infirmary ...	...	7
Jessop Hospital for Women ...	...	27
Burton-on-Trent General Infirmary ...	...	2
High Peak Isolation Hospital	...	—
Victoria Hospital, Worksop	...	—
Derbyshire Hospital for Women	...	8

A Consultant's opinion was requested in 16 cases, and was immediately provided.

**Ophthalmia Neonatorum.**—The incidence of Ophthalmia Neonatorum during the year and the results of treatment are set out in the following table :—

	<i>Cases.</i>					
<i>Notified.</i>	<i>Treated.</i>					
	<i>At</i>	<i>In</i>	<i>Vision</i>	<i>Vision</i>	<i>Total</i>	<i>No. of</i>
	<i>Home.</i>	<i>Hospital.</i>	<i>unimpaired</i>	<i>impaired.</i>	<i>Blind-</i> <i>ness.</i>	<i>Deaths.</i>
65	51	14	62	2	—	1

The County Council have made arrangements under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, for the following services :—

- (a) A second opinion on notified cases of Puerperal Fever or Puerperal Pyrexia.
- (b) The admission of such cases to Hospital.
- (c) The Bacteriological examination of :—
  - (i.) Lochia.
  - (ii.) Blood of such cases.



The County Council are not responsible for Maternity and Child Welfare work in the following Boroughs, and, therefore, Consultants and Hospitals are not available for these areas under the County scheme :—

Buxton.  
Chesterfield.  
Glossop.  
Ilkeston.

(a) CONSULTANTS.—The following have been recognised by the Ministry of Health and the County Council as Consultants under the Regulations for Derbyshire :—

- N. L. Edwards, Esq., F.R.C.S., 64, Friar Gate, Derby. (Tel. No. Derby 1551.).
- H. T. Hicks, Esq., F.R.C.S., 56, Friar Gate, Derby. (Tel. No. Derby 284.).
- W. W. King, Esq., F.R.C.S., 432, Glossop Road, Sheffield. (Tel. No. Sheffield Central 2726.).
- F. H. Lacey, Esq., M.D., 16, St. John's Street, Manchester. (Tel. No. Manchester Central 1500.).
- C. D. Lochrane, Esq., F.R.C.S., 65B, Friar Gate, Derby ; (Home Address) Darley Slade, Duffield Road, Derby. (Tel. No. Derby 1439).
- Miles H. Phillips, Esq., F.R.C.S., " Egerton House," 420, Glossop Road, Sheffield. (Tel. No. Sheffield Central 3020.).
- C. E. Potter, Esq., M.D., Rosehill House, Derby. (Tel. No. Derby 1372.).

When the services of Consultants are required, either at the time of sending the notification of Puerperal Fever or Puerperal Pyrexia to the District Medical Officer of Health or at any subsequent time, the form of application P.F. 2 should be completed and sent to the County Medical Officer, New County Offices, Derby.

In case of emergency, application should be made to the County Medical Officer either by telephone (Derby 355) or otherwise. If the office is closed and the case is urgent, application should be made direct to the nearest Consultant and form P.F. 2 sent within 24 hours to the County Medical Officer with a brief note to the effect that the Consultant was urgently required.

The Consultants' fees will be paid by the County Council, and the charges for this will not fall upon the General Practitioner, subject to the above procedure for immediate notification to the County Medical Officer being strictly adhered to ; but not otherwise. The fee will be recoverable by the County Council from the patient in part or in whole if her financial circumstances permit.

(b) ADMISSION OF PATIENTS TO HOSPITAL.—The County Council have made arrangements with :—

Burton-on-Trent General Infirmary. (Tel. No. Burton-on-Trent 34.).

Derbyshire Hospital for Women, Derby. (Tel. No. Derby 1401.)

Derbyshire Royal Infirmary, Derby. (Tel. No. Derby 668.)

High Peak Isolation Hospital, Chapel-en-le-Frith. (Tel. No. Chapel-en-le-Frith 24.)

Jessop Hospital for Women, Sheffield. (Tel. No. Sheffield Central 521.)

Victoria Hospital and Dispensary, Worksop. (Tel. No. Worksop 108.)

for the reception of notified cases of Puerperal Fever and Puerperal Pyrexia. When it is desired to admit such a case to hospital, application should be made to the County Medical Officer on form P.F. 2.

In cases of emergency, application should be made to the County Medical Officer by telephone, or, if the County Offices are closed and the case is urgent, application should be made direct to the Hospital by telephone, but cases should not be sent before a reply has been received from the hospital that a bed is available, and in such cases of emergency form P.F. 2 should be sent to the County Medical Officer within 24 hours, with a note that the case was admitted to the hospital (named) as an emergency. Arrangements for the removal of patients to and from the hospital will not be undertaken by the County Council.

(c) BACTERIOLOGICAL EXAMINATION OF LOCHIA AND BLOOD.—Specimens should be sent direct to the County Medical Officer, together with form P.F. 2.

PROVISION OF NURSES.—No provision has been made up to the present for the supply of trained nurses in the homes.

PUBLIC HEALTH (OPHTHALMIA NEONATORUM) REGULATIONS, 1926.—The County Council have also made arrangements with the Derbyshire Royal Infirmary for the treatment of notified cases of Ophthalmia Neonatorum.

Application should be made to the County Health Office by telephone. Should the necessity arise for treatment when the office is closed, application should be made direct to the Derbyshire Royal Infirmary and a communication sent to this office informing me of the circumstances.

**Compensation to Midwives.**—Section 2(1) of the Midwives Act, 1926, provides that where a midwife has been suspended from practice in order to prevent the spread of infection, she shall, if she was not herself in default, be entitled to recover from the Local Supervising Authority such amounts by way of compensation for loss of practice as is reasonable in the circumstances of the case.

During the year, 15 claims were received for such compensation, and the payments totalled £27 13s. 6d.

**Maternal Mortality.**—The Maternal Mortality rate for the County for the year 1930 was 4·16 per thousand births, as compared with 3·75, the rate for the previous year.

The following Table gives the Maternal Mortality rate in the County since 1916 :—

TABLE XXIII.

Year	Deaths from Puerperal Fever.	Rate per 1000 Births	Deaths from other accidents and Diseases of Pregnancy & Parturition	Rate per 1000 Births.	Total.	Rate per 1000 Births	No. of Births.
1916	19	1·45	45	3·43	64	4·88	13,109
1917	14	1·18	33	2·79	47	3·97	11,831
1918	10	·82	27	2·23	37	3·05	12,103
1919	15	1·26	40	3·38	55	4·64	11,838
1920	22	1·41	45	2·89	67	4·30	15,572
1921	12	·83	33	2·29	45	3·12	14,417
1922	17	1·30	35	2·67	52	3·97	13,095
1923	18	1·42	46	3·62	64	5·04	12,681
1924	17	1·34	32	2·53	49	3·87	12,615
1925	17	1·36	31	2·48	48	3·84	12,491
1926	18	1·52	36	3·04	54	4·56	11,845
1927	16	1·43	40	3·57	56	5·00	11,194
1928	21	1·89	27	2·43	48	4·32	11,112
1929	18	1·73	21	2·02	39	3·75	10,394
1930	18	1·70	26	2·46	44	4·16	10,562

As the Chesterfield Corporation only became a Local Supervising Authority in October, 1930, the numbers given above are for the whole of the Administrative County.

In future years the figures for Chesterfield Borough will not be included.

#### Investigations into Maternal deaths.

It has been the custom in this County for a considerable time to make investigations into every maternal death. The Ministry of Health sanctioned the expenditure of money for this purpose, and a report on every maternal death, as far as it was possible, was requested from medical practitioners. In my Annual Report for 1927 I analysed the figures resulting from such investigations during the five years 1923—1927. Circular 888 of the Ministry of Health, issued in April, 1928, requested that all maternal deaths should be investigated either by the Maternity and Child Welfare Authority or by the Local Supervising Authority, and issued a special report form to be completed in each case. The Ministerial form of report was immediately adopted in this County in place of that we had previously used, so that our Returns would be comparable with those of other areas and the County Council's full-time Maternity and Child Welfare Medical Officer, who has



specialist qualifications as an Obstetrician, was detailed to interview practitioners with a view to collaboration in making the necessary reports. The investigations are strictly private, and the instructions of the Ministry of Health with regard to these investigations are carried out with meticulous care.

To secure that no death from child-birth is overlooked, the County Council authorised payment to Registrars of Births and Deaths at the rate of 2d. for each Return and 2d. for each entry thereon, together with the cost of postages, in respect of deaths of all females between the ages of 15 and 45 from any cause whatsoever. These Returns are in all cases scrutinised by the Maternity and Child Welfare Medical Officer, and any death which would appear to be connected either approximately or remotely with child-birth is the subject of enquiry. Such deaths are investigated throughout the Administrative County, with the exceptions of the Boroughs of Chesterfield, Glossop, and Ilkeston, which Boroughs carry out their own investigations as autonomous Maternity and Child Welfare Authorities with whole-time Medical Officers of Health.

Similar investigations are carried out in cases of deaths from puerperal fever and puerperal pyrexia, but in these cases, should a midwife be involved, in addition to the investigation, the usual procedure for the prevention of the spread of infection is applied.

#### **Payment of Doctors' Fees under Section 14 (1) of the Midwives Act.**

In respect of the financial year ended March 31st, 1931, 953 claims were received from medical practitioners. Of these 920 were passed for payment amounting to £1453 16s. 9d., the remainder being disallowed as not complying with the conditions laid down by the Midwives Act and the Ministry of Health, or being cancelled by doctors previous to payment. Amounts refunded by patients for the same period amounted to £554 14s. 4d., but including this the total amount recoverable is £1,058 15s. 6d.

For the yearly expenditure incurred by the County Council in this connection since 1919 reference should be made to Table XXII.

**Provision of Free Milk.**—In respect of the financial year ended March 31st, 1931, 157 applications for free milk were received. Of these, 123 were for fresh milk and 30 for dried milk, 4 not having been granted. The expenditure was £52 19s. 2d. for fresh milk and £10 15s. 5d. for dried milk.

#### **NURSING HOMES REGISTRATION ACT, 1927.**

During 1930, two applications were made for registration under the above Act. One was granted and one was refused. At the end of 1930 there were 14 Homes on the County Register, as follows :—

General Nursing Homes	...	...	...	3
Maternity Homes	...	...	...	7
General Nursing and Maternity Homes	...	...	...	4

During the year, two Homes voluntarily closed down and one was closed by order of the County Council. No appeals were made against Orders either refusing or cancelling registration. No applications for exemption from registration were made during the year.

The County Council are responsible for the administration of the Nursing Homes Registration Act throughout its maternity and child welfare area, together with the Borough of Buxton, *i.e.*, the whole of the administrative County of Derby, with the exception of the Boroughs of Chesterfield, Glossop, and Ilkeston. The powers under the Act were delegated to the Borough of Chesterfield in July, 1928.

### MEDICAL TREATMENT OF CHILDREN UNDER FIVE YEARS OF AGE.

In December, 1929, a circular issued jointly by the Ministry of Health and the Board of Education (Circular 1054 and 1405) pointed out the State had made itself responsible for the health and education of all children from the age of five onwards, whilst considerable provision had also been made for the supervision of the health of babies during the first year or two of life under the provisions of the Maternity and Child Welfare Act, 1918. There is, however, a gap of three and four years before going to school, during which time a large number of children are, not infrequently, without help, direction, or succour from public sources, however much they may need it. It was stressed that there was great need for care and supervision, particularly where the home conditions were bad and where medical advice was either unattainable or difficult of attainment.

It was not proposed that there should be anything in the nature of a general inspection of children from the age of two to school entering age, but rather that they should be systematically visited by Health Visitors from birth to school age, and that where the Health Visitor found medical examination and treatment necessary, such should be available.

Systematic visiting of infants up to the age of five years is carried out in this County.

My predecessor, as long ago as 1921, impressed upon the County Council the desirability of making arrangements for the treatment of children under five years for minor ailments, enlargement of tonsils and adenoids, eye and ear conditions.

There can be no doubt that much sound preventive work can be done before the child enters school, and although the Maternity and Child Welfare Committee passed a resolution as far back as 1921 authorising their Medical Officer to provide various forms of treatment by arrangement with the Education Committee, whose medical staff carry out such treatment, the work was markedly limited by lack of staff.



Up to 1930, provision of treatment for children under five had been made by the Maternity and Child Welfare Committee by payment per case to the Education Committee, and to a great extent this still holds. Since the commencement of 1930, the Maternity and Child Welfare Committee have agreed to meet the cost entailed in the employment of a whole-time Dentist, so that of the nine Dentists on the Education Committee staff, one is provided wholly at the expense of the Maternity and Child Welfare Committee, and one-ninth of the time of the dental staff is now available and is employed in the treatment of children under five years of age suffering from dental effects. This is a step in the right direction, and it is only the economic position which has prevented dental treatment being extended so as to be available for expectant and nursing mothers. This latter service I believe to be of great importance, and it is hoped that circumstances will soon permit of its being adopted.

There is now available for children coming within the scope of the Child Welfare Committee, treatment of minor ailments, ear, nose and throat conditions, eye conditions, dental conditions, and orthopædic treatment for both in-patients and out-patients, the in-patients being at Bretby Hall Orthopædic Hospital.

### INFANT LIFE PROTECTION.

The Local Government Act of 1929 placed upon the Maternity and Child Welfare Committee the duty of supervision of infants under seven years of age who are received for reward, and the Committee appointed the Health Visitors throughout the County to act as Infant Life Protection Visitors in their respective areas.

Each child is visited at least quarterly, and, where circumstances indicate, more frequently. Enquiries are made as to any unauthorised persons receiving children under seven years of age for reward, and a list of suitable foster parents to whom children could be sent is kept at the Central Office.

All reports from the Visitors are carefully scrutinised at the Central Office to see that the home circumstances are such that the health and welfare of the children are safeguarded.

The number of children on the register at December 31st, 1930, was 80.

Since the taking over of the work from the Guardians, in April, 1930, 284 visits have been made. In four cases the parents have been requested to find more suitable foster-parents, and in one case only has it been necessary to remove a child from unsuitable guardians by Order.

### BOARDED-OUT CHILDREN.

The supervision of boarded-out children is being carried out on behalf of the Public Assistance Committee by the Maternity and Child Welfare staff. Except in the sparsely populated north-west area of the County, where the work is done by the Health Visitors, the service is in the hands of the Regional Inspectors of Midwives. In this connection, 766 visits have been paid.

### HEALTH VISITING IN THE HOMES.

A summary of the work done by Health Visitors during 1930 will be found in Table XLVIII, page 214.

### CLINICS AND TREATMENT CENTRES.

The Maternity and Child Welfare area of the County Council comprises the whole of the Administrative County, with the exception of the four Boroughs—Buxton, Chesterfield, Glossop, and Ilkeston—and the scheme provides 44 Centres, 17 in Urban Districts and 27 in Rural Districts. The staff available permits the majority of the Centres to hold weekly sessions. All Centres are under the supervision of a doctor and a Health Visitor is in attendance at each session.

Details of these Centres are set out in the following Table :—

TABLE XXIV.  
INFANT WELFARE CENTRES.

Address.	Whether Sessions are held weekly, fortnightly, etc.	Day and time of Meeting.	Average Attendance per Session.		No. Attended for First Time.		Present arrangements for medical supervision.
			Expectant Mothers	Children.	Expectant Mothers.	Children.	
URBAN DISTRICTS.							
ALFRETON.							
P.M. Church, Somercoates	Fortnightly	2nd and 4th Mons., 2—5	Nil	41·56	Nil	85	Dr. Pooler, Fortnightly
School Clinic, Grange St., Alferton	Weekly	Wednesday, 2—5	0·02	35·04	Nil	152	Dr. Pooler, Weekly
Congregational Assembly Room, Riddings	Fortnightly	1st & 3rd Mons., 2—4	0·05	37·72	1	73	Dr. Pooler, Fortnightly
ASHBOURNE.							
St. John's Rooms	Weekly	Wednesday, 12—4	1·37	33·63	23	168	Dr. Pierce, Fortnightly
BAKEWELL.							
Liberal Club	Weekly	Thursday, 2—4	1·58	26·12	29	42	Dr. E. Stephens, Fortnightly
BELPER.							
Green Hall	Weekly	Thursday, 2—4	0·06	28·36	1	175	Dr. Purce, Monthly
BOLSOVER.							
Bainbridge Hall, New Bolsover	Fortnightly	2nd & 4th Thurs., 2.30—5	0·02	14·77	1	33	Dr. Pooler, Fortnightly
CLAY CROSS.							
The Vicarage	Weekly	Tuesday, 1.30—4	0·91	51·67	15	162	Dr. Pooler, Weekly
DRONFIELD.							
Cong. Chapel	Weekly	Monday, 1—4	Nil	26·84	Nil	58	Dr. Burke, Monthly
HEANOR.							
School Clinic	Weekly	Monday, 1—4	0·46	57·87	12	298	Dr. Macdonald, Weekly
LONG EATON.							
4, Notts. Road	Twice Weekly	Mon. & Thurs., 2.30—4	0·04	61·59	2	282	Dr. Moir, weekly
Wes. Schoolroom, Victoria Street, Sawley	Fortnightly	2nd & 4th Tuesdays, 2—4	Nil	29·09	Nil	43	Dr. Moir, Fortnightly
MATLOCK.							
*Dean Hill House	Weekly	Thursdays, 2—4.30	—	—	—	—	Dr. Stephens, Fortnightly
NEW MILLS.							
St. James' Schoolroom	Weekly	Thursdays, 2—4	0·08	26·08	1	131	Dr. Pemberton Fortnightly
RIPLEY.							
Old Schools, Outram Street	Weekly	Monday, 10—4	0·62	75·75	10	186	Dr. Maemillan, Weekly
Bethel Chapel, Marehay.	Weekly	Thursdays, 10—12	1·79	46·38	14	67	Do.
SWADLINCOTE.							
Alexandra Road	Weekly	Monday, 2—6	1·87	51·95	38	215	Dr. Cochrane, Monthly
WIRKSWORTH.							
Parish Room	Weekly	Thursday, 2—4.30	0·02	25·28	1	153	Dr. Popham, Fortnightly

\* Opened March, 1931.

Address.	Whether Sessions are held weekly, fortnightly, etc.	Day and time of Meeting.	Average Attendance per Session.		No. Attended for First Time.		Present arrangements for medical supervision.
			Expectant Mothers	Children.	Expectant Mothers	Children.	
RURAL DISTRICTS.							
BAKEWELL. The Institute, Tideswell	Fortnightly	1st & 3rd Thursdays 1—5	0·79	18·71	4	28	Dr. Bryan, Fortnightly
BELPER. Parish Room, Duffield	Weekly	Monday, 2—4	0·02	18·48	1	24	Dr. Popham, Fortnightly
BLACKWELL. Cliff House, Shirebrook	Weekly	Wednesday, 2—4	1·08	42·55	19	171	Dr. Wear, Weekly
Pleasley. Primitive Methodist Chapel.	Fortnightly	2nd & 4th Thursdays, 2—4·30	0·81	33·14	1	32	Dr. Wear, Fortnightly
Langwith. Miners' Institute.	Do.	1st & 3rd Mon., 3—5	1·63	67·91	8	35	Do.
Tibshelf. Ch. Mission Room.	Do.	1st & 3rd Ths., 2·30—4·30	0·04	17·71	1	22	Do.
Blackwell. Newton, Church Hall	Do.	1st & 3rd Mon., 3·30—5	0·19	27·71	4	43	Do.
Hillstown. Miners' Welfare Inst.	Do.	2nd & 4th Mon., 1—5	0·52	29·69	1	37	Do.
Pinxton. Prim. Meth. School,	Do.	2nd and 4th Wednesdays 11·0—1·0	Nil	22·50	Nil	42	Do.
South Normanton. Mount Tabor Chapel	Do.	2nd & 4th Tues. 1·30—4	Nil	28·66	Nil	80	Do.
CHESTERFIELD.							
Eckington. Wesleyan Schoolroom	Weekly	Mon., 1 to 4	0·23	34·89	2	71	Dr. Morris, Fortnightly
Barrowhill. Church Hall	Weekly	Mon., 2—4	1·10	34·79	9	86	Dr. Burke, Monthly
Unstone. Wesleyan Church	Weekly	Tues., 2—4	0·04	12·44	1	24	Dr. Burke, Fortnightly
Staveley. P.M. Chapel	Weekly	Tuesday, 1·30—4·30	0·02	27·42	1	125	Dr. Peek, Monthly
Heath. Holmwood Mission Room	Weekly	Monday 2·30—4·30	0·04	25·89	Nil	43	Dr. Peek, Fortnightly
Stonebroom. Church Institute	Weekly	Monday, 10—12·30	0·04	28·56	1	72	Dr. Pooler, Weekly,
Grassmoor. P.M. School	Weekly	Monday, 2—4	0·37	39·20	3	58	Dr. Burke, Fortnightly



Address.	Whether Sessions are held weekly fortnightly, etc.	Day and time of Meeting.	Average Attendance per Session.		No. Attended for First Time.		Present arrangements for medical supervision.
			Expectant Mothers	Children.	Expectant Mothers	Children	
North Wingfield.	Weekly	Thursday, 2.30—4.30	0.08	39.74	3	100	Dr. Pooler, Fortnightly
Miners' Welfare.	Weekly	Thursdays, 2—4	0.08	25.50	2	52	Dr. Burke Fortnightly
Brimington. Church Hall	Weekly	Tuesday, 2—4	0.65	42.77	7	179	Dr. Morris, Fortnightly
Beighton. C. of E. Schoolroom	Weekly	Wednesday, 2—4	0.70	47.77	3	178	Dr. Morris, Fortnightly
Killamarsh. Free Church Room							
CLOWNE P.M. Chapel, Clowne	Weekly	Tuesday, 1.30—4	0.04	21.60	1	117	Dr. Wear, Fortnightly
HAYFIELD. Wesleyan Methodist Church, Hayfield.	Fortnightly	2nd & 4th Tuesdays, 2—4	0.04	10.91	Nil	16	Dr. Lynch.
SHARDLOW RURAL. Lenton Street School, Sandiaere	Fortnightly	2nd & 4th Mondays, 2—4.15	Nil	36.57	Nil	66	Dr. Hendry, Fortnightly
Co-op. Stores Committee Rooms, Drayeott	Do.	2nd & 4th Wednesdays, 1.30—4	1.00	15.45	4	33	Dr. Hendry, Fortnightly
Spondon. Wesleyan Chapel	Do.	1st & 3rd Tuesdays, 11—4.30	0.61	25.52	4	83	Dr. Hendry, Fortnightly
Cooks Institute, Melbourne	Weekly	Wednesday, 10.15—5	1.48	29.40	13	58	Dr. Hendry, Fortnightly



**Voluntary Infant Welfare Centres.**—During the financial year ended March 31st, 1931, 3 Voluntary Infant Welfare Centres received a Grant of £10 each from the County Council, namely :—Mickleover, Ashford and Bradwell.

In the case of Chapel-en-le-Frith and Clifton, the sums of £2 11s. 0d. and £10 12s. 9d. respectively were paid under the Block Grant system in accordance with Section 101 of the Local Government Act, 1929. These Associations have been assisted in the past by Grants of this amount direct from the Ministry of Health. Such Grants from the Ministry of Health are now dropped, and all assistance from public funds comes from the County Council.

### Ante-Natal Scheme.

The Ante-Natal scheme which was started in its present form in 1928 developed with great rapidity, as a result of its appreciation by doctors, midwives and patients. Before the scheme had been in operation a year, 12 Clinics, scattered throughout the County, had been opened, and during the first full working year, *i.e.*, 1929, 259 sessions were held with an attendance totalling 2,316. During 1930 it was found impossible, through lack of staff, to open any further Clinics. Indeed, it has been extremely difficult to keep pace with the work of the 12 Clinics, which has grown considerably during the year, as the figures for 1930, namely, 282 sessions and 3,117 attendances, show when compared with those given above for 1929.

It will be appreciated that first attendances of patients place more work on the Medical Officer of the Clinic than the subsequent visits. The number of first visits has increased from 939 in 1929 to 1,244 in 1930.

The following Table gives details as to the sessions and attendances at the various Centres :—

TABLE XXV.

<i>Clinic.</i>	<i>No. of Sessions.</i>	<i>First Visits.</i>	<i>Subsequent Visits.</i>	<i>Average attendance of expectant mothers per Session.</i>	<i>Post Natal Visits.</i>
New Mills ...	22	41	107	6.72	1
Shirebrook ...	25	220	277	19.88	10
Long Eaton ...	47	237	551	16.76	155
Derby ...	19	49	37	4.52	8
Clay Cross ...	24	160	201	15.04	12
*Ripley ...	22	74	48	5.54	—
Alfreton ...	22	136	215	15.95	43
Bakewell ...	19	29	30	3.10	—
Swadlincote ...	26	98	170	10.30	36
Staveley ...	22	114	153	12.14	—
Eckington ...	22	42	47	4.04	15
*Ashbourne ...	12	44	37	6.75	—
	282	1244	1873	11.06	280

\* The Ante-Natal Clinics at Ripley and Ashbourne are run at and in connection with the Maternity Homes.

The days and times of opening the Ante-Natal Clinics are shewn in the following Table :—

TABLE XXVI.

<i>Clinic.</i>	<i>Address.</i>	<i>How often held.</i>	<i>Day and time.</i>
New Mills.	Town Hall.	Fortnightly.	1st & 3rd Mondays, 11.45 a.m.—3 p.m.
Shirebrook.	Cliff House.	Fortnightly.	2nd & 4th Mondays, 11.0 a.m.—4.0 p.m.
Long Eaton.	4, Nottingham Rd.	Weekly.	Tuesdays, 2.0—4.0 p.m.
Derby.	School Clinic, Walker Lane.	Fortnightly.	2nd & 4th Tuesdays, 10.0 a.m.—12 noon.
Clay Cross.	Old Schoolroom, The Vicarage.	Fortnightly.	1st & 3rd Weds., 9.30 a.m.—12 noon.
Ripley.	Maternity Home, Grosvenor Rd.	Fortnightly.	2nd & 4th Weds., 2.30—4.30 p.m.
Alfreton.	School Clinic, Grange Street.	Fortnightly.	1st & 3rd Thursdays, 10.0 a.m.—4.0 p.m.
†Bakewell	Liberal Club.	Fortnightly.	2nd & 4th Thursdays, 11.0 a.m.—1.0 p.m.
Swadlincote.	School Clinic, Alexandra Rd.	Fortnightly.	1st & 3rd Fridays, 2.0 p.m.—4.0 p.m.
Staveley.	Primitive. Methodist Chapel	Fortnightly.	2nd & 4th Fridays, 9.30 a.m.—12.0 n'n.
Eckington	Wesleyan Schoolroom.	Fortnightly.	2nd & 4th Fridays, 1.15—4.0 p.m.
Ashbourne.	Maternity Home, Wirksworth Rd.	Monthly.	1st Saturday of each month.
*Matlock.	Dean Hill House.	Fortnightly.	2nd & 4th Thursdays, 11.0—1.0 p.m.

† Closed March, 1931.

\* Opened March, 1931.

**Child Guidance.**—This comparatively new movement has for its primary aim—prevention. Prevention pre-supposes the absence of developed disease and is peculiarly within the province of the Public Health Service.

The objects of the Child Guidance movement is directed towards straightening out the tangle of social, physiological and psychological conditions which result in a particular child becoming a misfit in society. To my mind, it is an excellent example of team work. The social, physiological and medical members of this team are already part of the Public Health service, and the psychological member should be also ; and, moreover, his Department should be a department of the general Maternity and Child Welfare and School Clinic, and not a separate entity.

Child Guidance is, in my opinion, productive of much good provided it is in the hands of those who realise its aim and its limitations. Having on the Council's medical staff an Officer who had made a special study of it, I felt that an opportunity had arisen to commence a Child Guidance movement in this County. Consequently, during the year a clinic for this purpose was opened at Dean Hill House, Matlock, and is run in conjunction with the Maternity and Child Welfare and School Clinics held there. Children are seen at the Child Guidance Clinic by appointment only.

The following Clinics and Treatment Centres are provided by the County Council :—

MATERNITY & CHILD WELFARE CENTRES—

See Table XXIV., pages 70-72.

ANTE-NATAL CLINICS—

See Table XXVI., page 74.

TABLE XXVII.

SCHOOL CLINICS :—

(1) MINOR AILMENT CLINICS.

Alfreton.	School Clinic, Grange Street.	Daily, a.m. Saturdays, a.m.
Belper.	Green Hall.	Thursdays, a.m. & p.m. Saturdays, a.m.
Dronfield.	New Council, Infants' School.	Mondays, a.m.
Heanor.	School Clinic, Wilmot Street.	Tuesdays, a.m. Thursdays, a.m.
Long Eaton.	School Clinic, 4. Nottingham Rd.	Fridays, a.m. Saturdays, a.m.
Matlock.	Dean Hill House.	Fridays, a.m. & p.m.
Ripley.	Council Infants' School.	Tuesdays, a.m. Thursdays, a.m.
Shirebrook.	School Clinic, Cliff House.	Daily, a.m.
Swadlincote.	School Clinic, Alexandra Road.	Mondays, a.m. Saturdays, a.m.

To these Clinics any ailing child may be sent by teacher or parent without an appointment.

(2) X-RAY CLINICS FOR TREATMENT OF RINGWORM.

Chesterfield.	School Clinic, Brimington Road.	Wednesdays, a.m. & p.m.
Derby.	New County Offices, St. Mary's Gate.	Tuesdays, a.m. & p.m.

(3) ULTRA-VIOLET RAY CLINIC.

Derby.	New County Offices, St. Mary's Gate.	Wednesdays, p.m.
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## (4) EAR, NOSE AND THROAT CLINICS.

Alfreton.	School Clinic, Grange Street.	1st Friday alternate months (operation & examinat'n). 1st Saturday each month (examination). 2nd Friday each month (operation).
Ashbourne.	Stone House, Dark Lane.	1st Monday, alternate months (examination). 3rd Friday, alternate months (operation).
Belper.	Green Hall.	1st Thursday each month (examination).
Clay Cross.	Junior Girls' School.	3rd Friday, alternate months (examination).
Chesterfield.	School Clinic, Brimington Rd.	2nd & 4th Mondays each month (examination). 2nd, 3rd & 4th Tuesdays each month (operation). 2nd Saturday each month (examination).
Chinley.	School Clinic, Lower Lane.	3rd Thursday each month (examination). 1st Tuesday each month (operation).
Derby.	School Clinic, Walker Lane.	1st Monday alternate months (examination). Every Wednesday (operat'n) 4th Saturday each month (examination).
Heanor.	School Clinic, Wilmot Street.	3rd Monday alternate months (examination). 5th Saturday in month (examination).
Long Eaton.	School Clinic, 4 Nottingham Rd.	1st Friday alternate months (examination).
Matlock.	School Clinic, Dean Hill House.	3rd Monday alternate months (examination). 3rd Saturday each month (examination).
Swadlincote.	School Clinic, Alexandra Rd.	4th Friday each month (examination).
Shirebrook.	School Clinic, Cliff House.	2nd Thursday each month (examination). 4th Thursday each month (operation).

A charge of 10/- is made for each operation for Tonsils and Adenoids, but may be wholly or partially remitted in necessitous cases.



Children must not be sent to the Treatment Clinics without an appointment.

(5) EYE CLINICS.

The Education Committee have one whole-time and one part-time Ophthalmic Surgeon who visit the various Clinics in the County to examine and prescribe for children found by the School Medical Inspectors to be suffering from eye defects. Clinics have been established at—

Alfreton.	School Clinic, Grange Street.	Each Tuesday, a.m.
Belper.	Green Hall.	3rd Monday in each month, a.m. & p.m.
Bolsover.	New Infants' Sch.	As required.
Chesterfield.	School Clinic, Brimington Rd.	1st, 2nd & 3rd Thursdays in each month, a.m. & p.m.
Chinley.	School Clinic, Lower Lane.	1st Monday & 1st Wednesday in each month, a.m. & p.m.
Clown.	Junior B. Sch.	As required.
Derby.	School Clinic, Walker Lane.	Each Friday, a.m.
Dronfield.	New Council Infants' School.	As required.
Eckington.	Wesleyan School.	As required.
Heanor.	School Clinic, Wilmot Street.	2nd & 4th Wednesday in each month, a.m. & p.m.
Killamarsh.	Council B. Sch.	As required.
Long Eaton.	Board Room, High Street.	2nd Monday each month, a.m. & p.m.
Matlock.	School Clinic, Dean Hill House.	4th Monday each month, a.m. & p.m.
Shirebrook.	School Clinic, Cliff House.	1st, 2nd & 3rd Thursdays in each month, a.m. & p.m.
Swadlincote.	School Clinic, Alexandra Road.	4th Thursday each month a.m. & p.m.
Wirksworth.	Newbridge C. Sch.	As required.

(6) DENTAL CLINICS.

Alfreton.	School Clinic, Grange Street.	Every day, a.m. & p.m. Saturday, a.m.
Ashbourne.	School Clinic, Stone House, Dark Lane.	3rd Monday in each month, a.m. & p.m. 1st, 2nd, 3rd & 4th Wednes- days in each month, a.m. and p.m. 1st & 3rd Thursdays in each month, a.m. & p.m. Saturdays, a.m.

Bakewell.	Liberal Club.	4th Monday each month, a.m. & p.m.
Belper.	Green Hall.	1st, 2nd & 4th Mondays, a.m. & p.m. Every Tuesday, a.m. & p.m. Every Friday, a.m. & p.m.
Chesterfield.	School Clinic, Brimington Rd.	Every day, a.m. & p.m. Every Saturday, a.m.
Chinley.	School Clinic, Lower Lane.	2nd, 3rd & 4th Tuesdays in each month, a.m. & p.m. Every Friday, a.m. & p.m. Every Saturday, a.m.
Derby.	School Clinic, Walker Lane.	Every Monday, a.m. & p.m. 1st, 2nd & 4th Tuesdays, a.m. & p.m. 2nd & 4th Thursday each month, a.m. & p.m. Every Friday, a.m. & p.m. Every Saturday, a.m.
Dronfield.	New C. Inf. Sch.	Every Tuesday, a.m. & p.m.
Heanor.	School Clinic, Wilmot Street.	Every Monday, a.m. & p.m. Every Tuesday, a.m. & p.m. Every Thursday, a.m. & p.m. Every Saturday, a.m.
Long Eaton.	School Clinic, 4, Nottingham Road.	Every Wednesday, a.m. & p.m. Every Friday, a.m. & p.m.
Matlock.	School Clinic, Dean Hill House.	1st, 2nd & 3rd Mondays in each month, a.m. & p.m. Every Wednesday, a.m. & p.m. Every Thursday, a.m. & p.m.
Swadlincote.	School Clinic, Alexandra Rd.	1st, 2nd & 4th Wednesdays, a.m. & p.m. 1st & 2nd Thursdays in each month, a.m. & p.m.
Shirebrook.	School Clinic, Cliff House.	Every day, a.m. & p.m. Every Saturday, a.m.
Bretby.	Orthopædic Hospital.	3rd Tuesday in month.

The above vary with the necessity for dental inspections.

(7) ORTHOPÆDIC CLINICS.

See Table XX, pages 52 & 53.

## (8) TUBERCULOSIS DISPENSARIES.

TABLE XXVIII.

Ashbourne.	Stone House, Dark Lane.	2nd & 4th Thursdays of the month, 11 a.m. to 1 p.m. Dr. P. Heffernan.
Burton.	31, Union St.	Mondays, 10.30 a.m. to 12.30 p.m. Dr. C. Kingston.
Chesterfield.	Brimington Rd.	Tuesdays and Fridays, 10 a.m. to 12.30 p.m. and 2 to 5 p.m.  X-Ray examinations of Pul- monary Cases on 1st and 3rd Mondays of each month only, 11 a.m. to 1 p.m. Dr. B. S. Nicholson.
Chinley.	Lower Lane.	Mondays, 11 to 1 and 2 to 5 p.m. Dr. P. Heffernan.
Derby.	County Offices, St. Mary's Gate.	Fridays, 10.30 to 12.30 and 2 to 4 p.m. Dr. C. Kingston.
Glossop.	Surrey Street.	Wednesdays, 11 to 1 and 2 to 4 p.m. Dr. P. Heffernan.
Ilkeston.	Albert Street.	Wednesdays, 11 to 1 and 2 to 4.30 p.m. Dr. C. Kingston.
Long Eaton.	The Hall.	Tuesdays, 10 a.m. to 12 n'n. Dr. C. Kingston.
Matlock.	Dean Hill House, Causeway Lane.	Tuesdays, 10 to 1 and 2 to 4 p.m. Dr. P. Heffernan.

## (9) TREATMENT CENTRES FOR VENEREAL DISEASES.

See Table XVI., page 48.

## (10) CHILD GUIDANCE CLINIC.

TABLE XXIX.

Matlock.	Dean Hill House.	Fridays.
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**LOCAL GOVERNMENT ACT, 1929.**

Part I of the Local Government Act, 1929, is largely a public health measure providing for the transference to County and County Borough Health Authorities those medical and semi-medical functions previously administered by Poor Law Authorities.

The overlapping of the Poor Law services with parallel public health services is a defect which has been commented on with sufficient frequency and persistence to make it redundant for me to make further mention of it here. The 1929 Act gives powers to remove this overlapping, in fact, one of its main objects appears to be to do away with the system which allowed identical services being rendered, on the one hand, by Local Authorities to the general public, and, on the other, by the Poor Law Authorities to that section of the population which at the time comes within the elastic definition, "Destitute."

The Act places upon County Councils powers and duties relating to :—

1. Vaccination.
2. Infant Life Protection.
3. The collection of fundamental vital statistics.
4. The provision and maintenance and management of public institutions for the treatment of the physically and mentally sick.

**Vaccination.**—Section 2 of the Local Government Act, 1929, transferred the vaccination from the Guardians to the Public Health Committee of the County Council. This service has been taken over by the Public Health Committee in accordance with the Act, and there are now functioning under the Public Health Committee 19 Vaccination Officers and 81 Public Vaccinators, including nine at the Public Assistance Institutions. The work is being carried on very largely on the lines adopted by the Guardians, and, generally speaking, changes have been made only where they have been unavoidable on account of the Officers' areas overlapping County boundaries, necessitating the transfer of such Officer to one or other of the Counties concerned. The change-over from the Guardians to the Public Health Committee took place on the appointed date, April 1st, 1930, with the utmost smoothness and without loss of continuity. The contracts of public vaccinators whose areas were wholly within the County were not terminated by the respective Guardians, and were continued by the County Council without alteration. The contracts with the public vaccinators whose areas overlapped County boundaries were terminated by the Guardians: the County Council, acting on the suggestion of the Ministry of Health, entered into fresh contracts with public vaccinators on the same terms for that part of their area within the County boundary.

The estimated cost to the County Council for this service was £2,700 per annum. At the date of this Report certain claims had not been received, but it is estimated that the expenditure on the first year's working will be £1,600.

The public vaccinators' returns as to the total number of vaccinations and re-vaccinations are made out for the year ending September 30th. For only half such year was the vaccination service under the County Council, and, therefore, the returns are not in-



cluded in this Report. These Returns are made for the purposes of the Registrar-General, and I am unaware of his reason for requiring them to be made up to the end of September. It would certainly be more convenient from our point of view were they made out to the end of the calendar year, as are the returns to the Registrar-General of the vaccination officers. These latter show that the number of certificates of successful primary vaccinations of children under 14 received during 1930 was 2,377, while during the same period the number of statutory declarations of conscientious objection received by vaccination officers was 6,406. These figures do not fully represent the whole of the County as, owing to unforeseen circumstances, the return from one vaccination officer's area—a small one—is incomplete.

**Infant Life Protection.**—This service was, in accordance with the Act, transferred to the Maternity and Child Welfare Committee as a function under the Maternity and Child Welfare Act, 1918, and is discharged by that Committee throughout the Maternity and Child Welfare area of the County, *i.e.*, the whole of the Administrative County of Derby, with the exception of the four Municipal Boroughs, Buxton, Chesterfield, Glossop, and Ilkeston, which are autonomous for maternity and child welfare work. The service of infant life protection is referred to under the section of the Report dealing with maternity and child welfare, page 68.

**The Collection of Fundamental Vital Statistics.**—The general administration in this connection and the supervision of Registrars is in the hands of the Clerk of the County Council.

**Provision, Maintenance and Management of Public Institutions for the Treatment of the Physically and Mentally Sick.**—The medical and semi-medical functions of the Guardians were of a somewhat comprehensive nature, and, generally speaking, they were such as to be easily co-ordinated with the existing County services, and it is anticipated that further development will be along the lines of such co-ordination. There is, however, one exception to this general rule—and it is a very important exception—the medical functions of Boards of Guardians largely consisted of the provision of institutional accommodation for the sick. It has been the custom to provide such institutional accommodation on premises within the same curtilage as accommodation for healthy paupers, and thus it results that the Poor Law hospitals to-day cannot be transferred to the Public Health Committee while the Public Assistance Committee has charge of any other portion of the Poor Law institution concerned, for a Declaration in accordance with Section 5 of the Local Government Act must be postponed in a County which does not possess separate hospitals for the sick or institutions which could be allocated for this purpose. Herein lies the exception, that in the case of institutional accommodation, urgent though the matter is, it cannot be dealt with at once, and must be developed and co-ordinated with other County medical services as time and circumstances permit.

As matters stand at the present moment, it is extremely difficult to make any suggestions as to the practical improvements in the user of existing Poor Law institutions in this County, and whilst one or perhaps two of the institutions would permit of efficient separation of the hospital from the "House," experience has shewn that there is no superfluity of beds which would allow the institution to be closed for Poor Law purposes and be given over entirely for the purposes of the Special Acts. Until such time as the Public Health Committee make known their intention as to the provision of hospitals for the sick generally—and this they cannot do until they have consulted with representatives of voluntary hospitals providing services in or for the benefit of the County—it appears to me that the Poor Law institutions must continue to be used for the purposes of the Sick Poor under the Public Assistance Committee. No Poor Law Institution has, therefore, been appropriated wholly or in part for other purposes. The following Table shews the extent to which the institutions are used:—

TABLE XXX.

<i>Name of Institu- tion.</i>	<i>Total Beds.</i>	<i>Average No. of beds occupied.</i>	<i>Ad- missions.</i>	<i>Dis- charges.</i>	<i>Deaths.</i>	<i>Average length of stay in days.</i>
Ashbourne ...	37	32	39	21	14	25
Bakewell ...	76	48	150	128	28	50
Belper ...	127	100	143	103	34	56
Chapel ...	79	56	116	110	20	113
Chesterfield ...	207	152	667	508	143	21
Glossop ...	75	68*	57	24	36	?
Hayfield ...	37	35†	46	50	10	153
Shardlow ...	95	75	204	78	37	91
	<hr/> 733 <hr/>	<hr/> 566 <hr/>	<hr/> 1422 <hr/>	<hr/> 1022 <hr/>	<hr/> 322 <hr/>	<hr/> 73 <hr/>

\* Average number not stated, but highest number occupied was 70 and lowest 66.

† Average number not stated, but highest number occupied was 39 and lowest 32.

**Provisions as to Alternate Powers for giving Assistance.**—Under Section 5 (1) of the Local Government Act, 1929, the County Council has declared that all assistance to necessitous blind persons shall be provided exclusively by virtue of the Blind Persons Act, 1920, and accordingly all such assistance has been given by virtue of that Act since April 1st, 1930.

## SANITARY CIRCUMSTANCES OF THE AREA.

### WATER SUPPLIES.

It is impossible in this Report to give full details of the water supplies of the whole County. Further particulars should be sought from the Annual Reports of the Medical Officers of Health of the various districts, and the information which is given in the

publication, "Wells and Springs of Derbyshire," published by H.M. Stationery Office, 1929. The following is a brief summary of the conditions existing in the various sanitary districts at the present time :—

### Urban Districts.

**ALFRETON.**—This district is supplied with water by the Derwent Valley Water Board (250,000 gallons per day), the Local Authority, and the Butterley Company. The U.D.C. have a 12" borehole at Lindway, 126ft. deep, the water being pumped to the Lindway Reservoir. The spring supply to the Lindway Reservoir is liable to pollution from many sources, and has bacillus coli in 1 c.c. of the water. It requires efficient filtration before distribution. After filtration the water is of a satisfactory quality and the hardness moderate—9·71 parts per 100,000. The Derwent Valley supply is entirely satisfactory for drinking purposes and the hardness 4·03 is low. To augment the existing sources of supply it was decided to take water from the Wingfield Manor Colliery. This water also requires very efficient filtration before distribution. Samples taken on the 25th Oct., 1928, had as much as 29 parts per 100,000 of chlorine and a total hardness of 42·18 parts per 100,000, and bacillus coli were found in 3 c.c.

Steps have been taken recently to prevent to some extent the pollution of the water which formerly occurred from road washings, farmyard poultry, a road ford and ditches, but there still remains a few possible sources of pollution from animals, etc.

I understand that the Urban District Council are contemplating boring for water at Dethick. Until the Wingfield Colliery supply was added, the quantity was at times insufficient.

**ALVASTON AND BOULTON.**—This area is almost entirely supplied by the Derby Corporation: a few wells remain, the water in them being, generally speaking, unsatisfactory, but the Derby Corporation supply is being rapidly extended.

**ASHBOURNE.**—This district is supplied by the Local Authority. In 1929, two boreholes at Rodsley were brought into use and came into operation on January 1st of that year. The water is pumped from Rodsley to the existing reservoirs on the outskirts of the town. The two boreholes are 300 feet deep. The water is derived from the bunter sandstone. It is bacteriologically good, but its hardness is decidedly high: a considerable amount of deposit is formed when the water is boiled. An analysis of a sample taken in September, 1930, shewed the hardness in parts per 100,000 to be as follows :—temporary 17·22, permanent 10·00, total 27·22.

**BAKEWELL.**—This supply is drawn from a series of springs in the millstone grit at Beeley Moor between Limetree Wood and Raven Tor about 980 ft. O.D. The average yield is about 120,000 to 150,000 gallons a day. Seven springs in Manners Wood, to the east of the



town, supply the Station, The Kennels, Brooklands, and the neighbouring premises. The water is satisfactory in quantity and quality: its hardness is low—under 4 parts per 100,000.

**BASLOW.**—This district is supplied with water by the Local Authority and the Duke of Devonshire. A few scattered farms have their own springs. The supply is obtained from springs in the millstone grit at Heathy Lea and Jack Flat. The supply is 70,000 gallons a day—a satisfactory quantity for the small population to be provided for. The water is satisfactory in quality.

**BELPER.**—This district obtains its water from springs in the grit at Springwood, 370 ft. O.D.; Bull's Moor, 430 ft. O.D.; Ladywell, 315 ft. O.D.; and Belper Lane, 320 ft. O.D. The average yields respectively are approximately 77,000, 40,000, 32,000, and 17,000 gallons per day. There are four reservoirs, namely, Bessyloan, with a capacity of 400,000 gallons; Bull's Moor, 275,000 gallons; Springwood, 275,000; and Ladywell, 38,000 gallons. The three last-named reservoirs are supplied by springs, and can be supplemented by water pumped from the waterworks in the Meadows, where the pumping apparatus is capable of delivering 140,000 gallons per hour into the reservoirs. An analysis (made in August, 1930) of the Springwood reservoir water shewed it to be of satisfactory quality for the purpose of a public supply. The hardness is moderate, the temporary hardness being 1·81, permanent hardness 10·75, total 12·56. The Bull's Moor reservoir water is satisfactory in quality and well adapted for the purpose of a public supply. The hardness is moderate, namely, temporary hardness 1·81, permanent 10·60, total 12·41. The water from Ladywell reservoir analysed in July, 1930, shewed it to be of a fairly satisfactory quality. This sample shewed the presence of organic matter of vegetable origin, but there is no indication of serious pollution. The hardness was on the high side, namely, temporary 8·86, permanent 11·14, total 20·00. The water from the Meadows analysed in July, 1930, shewed no indication of pollution, although there were slight traces of organic matter—temporary hardness 11·60, permanent 12·00, total 23·60. The water is satisfactory in quality for drinking purposes.

**BOLSOVER.**—The Urban District Council owns three sources of supply :—

1. From the tunnel and cutting of the L.M.S. Railway line between Bolsover and Scarliffe Stations. The tunnel is cut through the magnesian limestone and the middle coal measures.
2. From a well and borehole near Bolsover Station, 140 feet deep, into the upper coal measures.
3. From a well at Whaley, 36 feet deep, sunk into the limestone.



At the tunnel and borehole waterworks, the minimum yield is 17,000 gallons per day, and a water softening plant is installed there. The analysis of the tunnel water shows the total hardness to be 25·7 parts per 100,000—15·7 permanent, 10·0 temporary. The water contains a very small proportion of unoxidised organic matter, and the nitrogen as nitrates show that nitrification is proceeding satisfactorily.

The water from the borehole has a total hardness of 26·6 parts per 100,000, 14·8 being permanent and 11·8 temporary. It shows no indication of pollution and is satisfactory for drinking purposes.

The Whaley well plant is capable, at present, of dealing with 200,000 gallons per day. This water is decidedly hard, shewing approximately 48 parts per 100,000, 27 of which are permanent and 21 temporary. The water is otherwise satisfactory in quality for drinking purposes.

A concrete water tower was constructed in 1929 near Hillstown, having a capacity of 150,000 gallons, to store the water pumped from the Whaley well.

There appears to be an ample supply of water available at the Whaley well by development. An eighteen days' continuous pumping test gave a daily yield of 1,158,000 gallons. The water is pure both chemically and bacteriologically.

BONSALL.—The waterworks for this district, owned by the Local Authority, consist of three small covered reservoirs, fed by springs from the carboniferous limestone formation, one at Manor Farm, one at Upper Town and the other known as "Boiling Pot." A further spring at Manor reservoir has been carried into the existing inlet by means of a 2" cast-iron pipe. This provides an adequate supply of water in dry periods without using brook water. The Manor Farm reservoir supply is satisfactory, both bacteriologically and chemically, and a sample taken on March 30, 1931, shewed the total hardness to be 23·60 parts per 100,000, of which 7·28 is permanent.

The small hamlet of Slaley is now supplied from a spring in Slaley, the water from which is collected into a 3,000 gallon chamber and pumped at intervals into a high-level covered reservoir, also of 3,000 gallons capacity. A few houses have been connected up, and four stand-pipes at convenient places have been provided. The supply appears to be ample and satisfactory both bacteriologically and chemically, a sample taken on March 30, 1931, shewed the total hardness to be 21·50 parts per 100,000, of which 6·76 is permanent. The sample contained a trace of iron.

BRAMPTON AND WALTON.—This district is supplied by the Chesterfield Borough Council.

BUXTON BOROUGH.—The Local Authority owns the waterworks. There are moorland catchment areas at Staveley Moor, Burbage Hogshaw, and Black Edge on the millstone grit and limestone shale. The water is collected in reservoirs and supplies practically the whole of the district.

CHESTERFIELD BOROUGH.—This district is supplied by the Borough Council.

Linacre and Holme Brook Works. These works consist of the Upper, Middle and Lower Linacre reservoirs, filtration works, pumping station, and a borehole in the millstone grit at Linacre, and a pumping station and a borehole at Holme Brook in the lower coal measures. The gathering ground is approximately 1,700 acres and the storage capacity amounts to over 247,000,000 gallons. The water from the Linacre works show the total hardness as approximately 8 parts per 100,000 and that the water is free from *Bacillus Coli* in 100 c.c., and is of a satisfactory quality for drinking purposes. There have been no recent analyses of the Holme Brook borehole supply. The analysis given in "Wells and Springs of Derbyshire" show that the water is satisfactory in quality for drinking purposes and that it is abnormally soft, the total hardness being only 1 part per 100,000.

Borehole Scheme. This scheme consists of boreholes and pumping station at Whispering Well in the millstone grit and a borehole at Hunger Hill in the Chatsworth grit, together with a service reservoir at Whispering Well having a capacity of 550,000 gallons. The total daily yield from the existing works is 1,750,000 gallons. The analyses of the water from the Whispering Well shew a variation in the hardness. The last sample taken in December, 1930, shewed a total hardness of 5·4 parts per 100,000 (permanent 1·7, temporary 3·7). The total hardness has on occasions been as high as 19 parts per 100,000, and in the sample taken in December, 1930, there was a higher percentage of unoxidised organic matter than is desirable.

CLAY CROSS.—This district is supplied by the Local Authority. The water is derived from Woferly Springs, the Press Brook and Grinder's Well. A borehole was put down in 1904 to a depth of 297 feet into the millstone grit. The Grinder's Well water and the Press Brook water are filtered. The total quantity is 136,000 gallons per day. The Woferly springs rise from the lower coal measures.

DRONFIELD.—This district is supplied by the Chesterfield Rural District Council.

GLOSSOP BOROUGH.—This district is supplied by the Local Authority. The sources of supply are as follows:—

All Saints' Ward and St. James' Ward—main supply from Swineshaw reservoir (Glossop Corporation): capacity 56,000,000 gallons; small supply in Whitfield (123 houses) from a public company;

Simmondley (19 houses) from springs;

Higher Dinting (8 houses) from reservoir of Lord Howard and from springs;

HADFIELD WARD.—Main supply from two reservoirs in Padfield Main Road.—Small reservoir at lower end of Padfield Main Road.—Small reservoir, Greenwood's Field.—Small reservoir, Park Road.—Shaw Reservoir (for 11 houses)—Gamesley Reservoir.

The supply is sufficient for present purposes, but a supplementary supply will be necessary to enable conversion of privies to the water carriage system. The consumption is estimated at 488,500 gallons per day, plus water used for trade purposes in Hadfield from separate compensation reservoirs.

The Hadfield supply is markedly plumbo-solvent. The amounts of metallic lead in various analyses have been in the vicinity of half a grain per gallon, and in some cases as high as 9 grains per gallon. The Medical Officer of Health, Dr. Milligan, has made praiseworthy efforts to see that every precaution is taken to ensure that the public health shall not suffer from the excessive lead.

HEAGE.—This district is supplied by the Derwent Valley Water Board (1,000 gallons per day), the Local Authority, and the Belper Urban District Council. The main supply is from the Belper Urban District Council, by meter, from the Bessyloan reservoir. The lower portion of Ambergate is supplied by a small spring, which is collected into a tank. The water appears to be of satisfactory quality.

HEANOR AND ILKESTON.—These two districts are supplied with water by the Ilkeston and Heanor Water Board, also part of the Urban District of Ripley is supplied from this supply. The water-works are at Whatstandwell, and consist of pumping, softening, and filtration plants. The water mainly used is from the Meerbrook Sough, which takes water from the old lead mine levels under Wirksworth and Middleton, cut in the carboniferous limestone and millstone grit. The water is pumped from the works after softening and filtering to Chadwick Nick reservoirs 700 ft. O.D., and thence it gravitates to service reservoirs at Codnor, Shipley, and Tag Hill. At the works there are, in addition to the Sough water, two boreholes, one 20" in diameter, 174 feet deep, and the other 10" in diameter and 130 feet deep.

The Board is allowed to take from the Meerbrook Sough up to 3,000,000 gallons per day, which, with a supply of 750,000 gallons per day from the two boreholes, gives an available supply of 3,750,000 gallons per day. The maximum demand up to the present has been 2,300,000 gallons per day. The available quantity is ample, and the quality of the water as supplied from the works is satisfactory in every way. The Meerbrook Sough untreated water has been found to contain *Bacillus Coli*. Known sources of pollution are being dealt with, and, pending the completion of the necessary work, the water is being satisfactorily chlorinated. The water as delivered from the works after chlorination, softening and filtering, is quite satisfactory.



Meticulous care is taken to ensure the purity of the water as supplied to the public, and samples are brought to the County Laboratory for analysis at least monthly. The analyses shew that the water from the 10" borehole is free from pollution and has a total hardness of about 19 parts per 100,000—12·5 of which are temporary in nature. From the 30" borehole the water is free from pollution and has a hardness of about 18 parts per 100,000, 12 of which are in the form of temporary hardness. The Meerbrook Sough water shews no indication of pollution, on chemical analysis. The hardness is, however, in the vicinity of 30 parts per 100,000, approximately half of which are temporary and half permanent. The water as delivered to the service reservoir is chemically free from any signs of pollution and shews a total hardness of 14 parts per 100,000, approximately four of which are temporary. The bacteriological examinations of various samples taken towards the end of 1930 are given below, and bear out what is mentioned above, namely, that the water as supplied from the works is free from any signs of bacteriological pollution:—

SAMPLES OF WATER TAKEN DURING 1930.

<i>Date.</i>	<i>Source.</i>	<i>No. of Bacteria per c.c. on Agar.</i>	<i>No. of Bacteria per c.c. on Gelatine.</i>	<i>B. Coli found.</i>
22/ 9/30	10" Borehole. Raw.	4	24	In 10 c.c.
26/ 9/30	10" " "	Nil	Nil	Not in 250 c.c.
22/ 9/30	30" " "	Nil	8	Not in 250 c.c.
22/ 9/30	Meerbrook Sough. Raw	2	148	In 1 c.c.
8/12/30	" " "	12	30	In 2 c.c.
15/12/30	" " "	12	44	In 1 c.c.
22/12/30	" " "	4	10	In 0.1 c.c.
22/ 9/30	Tap water, filtered	2	6	Not in 150 c.c.
8/12/30	" " "	2	12	Not in 200 c.c.
15/12/30	" " "	6	1	Not in 200 c.c.
22/12/30	" " "	Nil	4	Not in 200 c.c.

LONG EATON.—This district is supplied by the Derwent Valley Water Board (150,000 gallons per day) and the Local Authority. Part of the district's supply comes from a well and boreholes with "headings" in the millstone grit at Stanton-by-Bridge, and the remainder is obtained in bulk from the Derwent Valley Water Board. The District Council also supplies Kegworth, Stanton-by-Bridge, and Castle Donington. The water from Stanton is very hard. Analyses of samples have shewn total hardness as high as 60·64 parts per 100,000—temporary 26·92, permanent 33·72. The total hardness is usually in the vicinity of 40 parts per 100,000. The Derwent Valley supply shews a hardness of about 2·7, and the public supply varies in hardness according to the mixture of the two sources.

MATLOCKS.—This district is supplied by the Local Authority. The supply to Matlock is from springs in the millstone grit at Matlock Moor and the Wolds. The yield of the springs is 200,000



gallons per day, and, with an adjacent bore, a total of 215,000 gallons per day is available. The supply gravitates to a reservoir (12,000,000 gallons) at the Wolds. Matlock Bath takes a supply from springs at Hackney, which issues from the Kinder Scout Grit. An analysis of the public supply from a tap at Matlock Bath taken in July, 1930, shows 15 parts of solid matter and a total hardness of 9, 1.3 of which is temporary. The appearance of the sample was markedly greenish-yellow. This discolouration was of a temporary nature, and the hardness of this sample is higher than usual. Apart from the temporary discolouration which occurred at the time of taking the July sample, the water is of satisfactory quality for drinking purposes.

Riber, Starkholmes, Hearthstone, High Lees and Tansley are supplied from local springs in the millstone grit.

A piped supply is taken to Cromford from tanks supplied by several springs at Willow Well, Derby Road, and Black Rocks.

**NEW MILLS.**—This district is supplied by the Local Authority. The present sources of supply are as follows:—

Ball Beard Reservoir, 1,166,000 gallons; 762 O.D., fed by surface water.

Low Leighton Reservoir, 1,190,000 gallons; 502 O.D., fed by surface water.

Both supplies are liable to contamination. The supply to these two reservoirs can be augmented when required by pumping from the Gow Hole Colliery Adit, which has a yield of 200,000 gallons per day. This water is extremely hard—42.4 parts per 100,000.

Ollersett reservoir was closed in 1924 as it was liable to pollution.

Moorlands tank, 5,000 gallons. This supply, though very small, is of good quality.

The New Mills water is not softened, but is filtered by passing through Bell's pressure filters.

The area of constant supply is limited to about the 600 feet contour.

**NORTH DARLEY.**—This district is supplied by the Local Authority. The Sydnop scheme takes the water from several springs which rise in the millstone grit along the side of the Sydnop Brook valley, and is collected in a small reservoir with a filter. Little Rowsley's supply is from springs in the grit in Rowsley Wood, while springs in Copley Wood and Upper Hackney supply Tinkersley and Upper Hackney. The yield of the Sydnop scheme is about 490,000 gallons per day. An analysis of the Sydnop spring supply shows the water to be clear and only very slight traces of organic matter present. There is no indication of pollution and the hardness is low, the total hardness being 5.0, 4.5 of which are of a permanent nature.

**RIPLEY.**—This district is supplied in bulk from the Ilkeston and Heanor Water Board and the Derwent Valley Water Board (210,000 gallons per day). The Council have a low level reservoir which has recently been reconstructed in concrete, having a capacity of 317,000 gallons. The water can be pumped from this reservoir to a high level tank.

**SOUTH DARLEY.**—This district is supplied by the Local Authority and the water is derived from springs in the millstone grit on Stanton Moor. The water is plumbo-solvent, and tin-lined pipes are used.

**SWADLINCOTE.**—This district is supplied by the Local Authority and the Swadlincote and Ashby Joint Water Committee. There is a supply of water to a small area pumped from the Stanton Colliery. The Swadlincote and Ashby Joint Water Committee's supply is from a "heading" in the bunter sandstone at Milton from where the water gravitates to the pumping station near Milton. The water is softened and pumped to two reservoirs at Woodville. After treatment, it is still fairly hard, the total hardness being 16·58 parts per 100,000. The supply is satisfactory in quality and quantity.

**WIRKSWORTH.**—This district is supplied by the Local Authority. The supply is from underground springs issuing from the Lower Kinderscout grit, collected in a covered reservoir above Breamfields on Wirksworth Moor. The overflow from these reservoirs is taken into three uncovered reservoirs, which have recently been re-conditioned (being formerly mill ponds). The capacity of the three open reservoirs is about 750,000 gallons. The water is of satisfactory quality and the hardness is low, being about 7·14 parts per 100,000. The water requires adequate filtration, and I am of opinion that it would be advisable to cover the three uncovered reservoirs and to take steps to see that they are protected against the entrance of insect life from the surrounding earth.

### **Rural Districts .**

#### *Districts and Parishes.*

#### *Sources of Supply.*

#### **Ashbourne.**

ALKMONTON.	Shallow wells.
ATLOW.	Shallow wells and rain water.
BALLIDON.	Shallow wells and rain water.
BIGGIN.	Rain water collected in meres.
BRADBOURNE.	Wells up to 40 feet deep.
BRADLEY.	From Lady's Spring in the limestone shales, south-west of Bradley Church, and raised by ram to Hall premises.

BRAILSFORD.	Two wells in the glacial sand and gravel on the north side of the village, with a piped supply. Owned by Col. G. A. Strutt.
BRASSINGTON.	Wells in the carboniferous limestone. The water in several of these wells is unsatisfactory in quality.
CALLOW.	Wells in the shale grit.
CARSINGTON.	Springs and shallow wells in the carboniferous limestone.
CLIFTON.	Springs from glacial deposits east of Clifton Church, and from a small stream near "The Hollies."
EATON & ALSOP.	Water derived from Nabs Spring in the carboniferous limestone near the River Dove, at Newton Grange, and raised by ram to a reservoir near Hanson Grange.
EDLASTON.	Wells in the bunter sandstone and limestone.
FENNY BENTLEY.	Springs and shallow wells in the carboniferous limestone and shales.
GRIFF GRANGE.	Wells in the shale grit.
HARTINGTON NETHER QUARTER.	The supply here is from springs in the limestone, supplemented with rain water.
HARTINGTON TOWN QUARTER.	The supply for this Parish is from wells in the limestone. As is usual in limestone areas, the wells are particularly liable to pollution, and numerous samples taken during the year have shewn that, generally speaking, the wells in this area are polluted. The Ashbourne Rural District Council are taking steps to lay new sewers at Hartington with a view to preventing the pollution of the village wells.
HOGNASTON.	Springs and wells in the carboniferous limestone and shales.
HOLLINGTON.	By ram from a spring in the Keuper Marl to the east of the village (3,000 gallons per day). The works are owned by W. Hall, Esq.
HOPTON.	Springs in the shale grit, in Callow Parish, and spring supplies to several farms.

HULLAND.	Springs in the bunter, south-east of Hulland Hall, and from a spring to the north of the Old Hall.
HULLAND WARD.	Wells in the bunter.
HULLAND WARD INTAKES.	Wells or springs in the bunter.
HUNGRY BENTLEY.	Shallow wells.
IBLE.	Rain water and a few springs issuing from the junction of the limestone and toadstone.
KIRK IRETON.	The Local Authority owns the waterworks. There are two springs from the sandstone in Limestone Shales, near the Church, the water being raised by rams to a reservoir above village. The water is of satisfactory quality and free from lead.
KNIVETON.	Wells in the Limestone and Shales.
LEA HALL.	Spring and shallow wells in the limestone.
LONGFORD.	LONGFORD HALL.—From Springs from the Drift over the Keuper Marl, in the Park, and shallow wells.  At LONGFORD DAIRIES there is a borehole 340 feet deep in the alluvium Keuper Marl, yielding 5,000 gallons per hour, for use at the factory.
MAPLETON.	Shallow wells in the limestone.
MERCASTON.	Wells in the Trias.
MIDDLETON-BY- WIRKSWORTH.	The waterworks are owned by the Local Authority. The water is supplied from springs, with a "heading," at the junction of the limestone and toadstone, and is collected in two reservoirs. The quantity is insufficient. Negotiations are in progress for the formulation of a scheme to obtain water from the Dunsley Spring in Via Gellia. This water is of satisfactory quality but the hardness is rather high (22.40 parts per 100,000). The water is satisfactory and free from lead.
NEWTON GRANGE.	Water derived from Nabs Spring in the carboniferous limestone, near the River Dove, at Newton Grange, and raised by ram to reservoir near Hanson Grange.



OFFCOTE AND UNDERWOOD.	Wells and springs in the limestone and trias outcrops.
OSMASTON.	Wells about 40 feet in Drift.
PARWICH	Springs from the limestone and shales, and from shallow wells PARWICH LEES is supplied from the Newton Grange supply.
RODSLEY.	Shallow wells.
SHIRLEY.	Shallow wells and by ram from a spring in the Faulted Trias, east of Shirley Bridge.
SNELSTON.	From Betling Spring, south of Snelston Hall. Borehole 174 feet deep in the Keuper Marl at Snelston Firs (600 gallons per hour).
STURSTON.	Springs from the glacial deposits and shallow wells in the Trias.
THORPE.	Partly supplied by works owned by Messrs. Marsden, Thompson & Evershed, Ltd., from the Fenny Bentley Spring in the carboniferous limestone at Upper Pasture Tops. The remainder of the parish is supplied by shallow wells.
TISSINGTON.	Wells in the limestone and shales.
WYASTON.	Spring on the east of Wyaston Brook (from the Trias).
YEAVELEY.	Shallow wells.
YELDERSLEY.	Hall and estate are supplied from a borehole, 120 feet deep, into the Bunter sandstone (yield 4,000 gallons per day), and from a small stream, east of the Hall. There are three storage reservoirs.

### **Bakewell Rural.**

Parts of Ashford, Calver, Eyam, Froggatt, Great Longstone, Hassop, Little Longstone, Rowland, Stoney Middleton.	Supplied by Local Authority's scheme from springs in the millstone grit at Stoke Flat, Froggatt Edge, where the water is filtered, but the storage is insufficient. In continued dry weather, some water shortage occurs. There are two service reservoirs, one at Rowland and one at Ashford. Hardness of water, approx. 4 parts per 100,000.
ABNEY.	Springs (north of the village) from the limestone shales.

ABNEY GRANGE.	Spring.
ALDWARK.	Few springs and rain water.
BEELEY.	Springs from the millstone grit.
BIRCHOVER.	Local Authority's supply from springs in the millstone grit at Upper Park Plantation.
BLACKWELL.	Supplied from five wells in the carboniferous limestone, and from Calton Hill Quarry, south of the village.
BRADWELL.	Local Authority's supply from springs in the sandstone in limestone shales, at Dead Man's Clough, east of Hazelbadge Hall.
BRUSHFIELD.	By ram from a spring in the toadstone outcrop in Monsal Dale.
CHATSWORTH.	The Chatsworth Estate Company provides a piped supply from the Emperor Spring in the millstone grit in the Park.
CHELMORTON.	By Local Authority—from springs to the north of the village, issuing from the junction of the limestone and toadstone.
CURBAR.	By Local Authority—from springs in the millstone grit with a small reservoir at Curbar Edge.
ENDSOR.	By Chatsworth Estate Co., piped supply from springs in the millstone grit, Calton Plantation, near Endsor.
ELTON.	From two springs in limestone shales at Bury Cliff Wood and Silverwell. Unsatisfactory.
EYAM.	The Local Authority owns the waterworks, which consist of a piped supply from a reservoir at High Cliff, where the water is derived from the sandstones in the limestone shales. A new reservoir has recently been constructed, but has been found unsatisfactory owing to an unsuitable foundation. A site for another reservoir is being selected.
EYAM WOODLANDS.	Public supply from the millstone grit on the north side of MagClough, three-quarters of a mile west of Grindleford bridge (22,000 gallons per day). This supply provides water for Grindleford up to the 700 feet contour.

- FLAGG. The Local Authority supplies water from an old mine shaft in the carboniferous limestone. The water is satisfactory.
- FOOLOW. Springs and rain water. Supply inadequate. The Duric Well, N.E. of Bretton, in the limestone shales, supplies Bretton village.
- GRATTON. Spring in millstone grit at Rock Farm.
- GREAT HUCKLOW. Spring in limestone shales at Camphill Farm.
- GREAT ROWSLEY. The Haddon Estate Company provides a supply from springs in the limestone shales at Pilhough, with a reservoir at Peak Tor.
- GRINDLOW. Springs and rain water.
- HARTHILL. Springs.
- HARTINGTON  
MIDDLE  
QUARTER. The village of Earl Sterndale and most of the Parish of Hartington Middle Quarter depend on rain water. Springs are rare in the district, and it has been difficult to find an adequate supply for the village of Earl Sterndale. The nearest available supply is from the Greenside scheme in the Chapel-en-le-Frith Rural District, and situated about a mile north of Earl Sterndale. Negotiations for this supply have failed in the first instance on the grounds of cost.
- HATHERSAGE. The Local Authority has recently purchased the old waterworks, which obtain water from springs and from the impounding of the Dale Brook. The water is collected in reservoirs. A scheme has been sanctioned for obtaining water from the spring issuing from the millstone grit near the Burbage Brook, "Fox House." An analysis of this latter supply shews the water to be entirely satisfactory for domestic purposes. It is proposed to construct a reservoir of 1,280,000 gallons capacity at a sufficient height to give a constant supply to the higher parts of Hathersage and Outseats.
- HAZELBADGE. Springs.
- HIGHLOW. Springs.
- LITTLE HUCKLOW. Springs and rain water collected in meres. Supply inadequate.

LITTON.	Partly from the Tideswell Water Committee's supply—remainder from wells.
MIDDLETON.	From a spring which supplies Lomberdale House, Youlgreave.
SMERRILL.	Rain water.
• MONYASH.	Springs and rain water—supply inadequate.
NETHER HADDON.	Springs.
NETHER PADLEY.	The Local Authority provides a supply from springs in the millstone grit.
OFFERTON.	Springs in the limestone shales.
OUTSEATS.	Springs in the millstone grit.
OVER HADDON.	By a ram from the River Lathkil.
PILSLEY.	Piped supply from springs in the millstone grit in Calton Plantation, near Endsor.
SHELDON.	The Local Authority provides a supply averaging 1,200 gallons per day from springs issuing from the limestone-toadstone junction, in Shacklow Wood, half a mile north-west of Sheldon Church, for a portion of the parish. The remainder of parish depends on rain water.
TADDINGTON.	The Local Authority provides a supply from springs at Five Wells, one mile to the west of the village. The water issues from the limestone-toadstone junction. Rain water is used in some parts.
TIDESWELL.	The Tideswell Water Committee provides a piped supply from a spring in the carboniferous limestone at Brook Head, $1\frac{1}{2}$ miles north-west of the village. The water is satisfactory, but the hardness is rather high.
WARDLOW.	Rain water collected in meres.
WHESTON.	Rain water collected in meres.
WINSTER.	The Local Authority supplies from springs in the millstone grit at Upper Park Plantation. The supply is inadequate, but the quality appears to be satisfactory.
YOULGREAVE.	Spring issuing from the millstone grit at Bleakley Plantation.



**Basford.**

- CODNOR PARK. Partly by Butterley Colliery, Ltd.
- SHIPLEY. Partly by Ilkeston and Heanor Water Board and partly by Shipley Colliery Co., from their colliery shaft sunk in the Middle Coal Measures to a depth of 336 feet.

**Belper.**

- ALDERSWASLEY. Captain FitzHerbert Wright, from springs collected in a reservoir.
- ALLESTREE. Derby Corporation.
- ASHLEYHAY. Springs from the millstone grit.
- CRICH. Local Authority. By ram to reservoir from Carver Spring, Dethick, and from private Springs. The Carver Spring issues from the millstone grit.
- WHATSTANDWELL. Local Authority. Partly from Crich Carr springs in the millstone grit.
- DARLEY ABBEY. Partly by Derby Corporation and partly from four springs in the Keuper Marl.
- DENBY. Smalley Joint Water Committee. Received in bulk from Belper U.D.C. and stored in a reservoir at High Wood, Pinehom's Hill.
- DETHICK, LEA, By Local Authority.  
AND HOLLOWAY. (1) From Carver Spring in the millstone grit at Dethick, raised by ram to reservoir.  
(2) Cattley Well, Dethick.
- DUFFIELD. By Local Authority.  
(1) From springs in the Bunter Pebble Beds at Cross-o'-th'-Hands.  
(2) Spring in the grit at Handley Wood; storage in reservoir at Hazlewood.
- HAZELWOOD. Springs from the millstone grit and wells. Not satisfactory in dry weather.
- HOLBROOK. Belper U.D.C.
- HORSLEY. Smalley Joint Water Committee from Belper U.D.C.
- HORSLEY WOODHOUSE. Smalley Joint Water Committee. From Belper U.D.C.

IDRIDGEHAY AND ALTON.	Shallow wells and springs. (Limestone shales area).
KEDLESTON.	Lord Scarsdale. Lion's Mouth Spring in Kedleston Park, rising from alluvium.
KILBURN.	Smalley Joint Water Committee. From Belper U.D.C.
KIRK LANGLEY.	Springs and shallow wells.
MACKWORTH.	Springs and shallow wells.
MAPPERLEY.	Mapperley Colliery Co., from the West Halam Pit, in the middle and lower coal measures to a depth of 358 feet.
MARKEATON.	Derby Corporation.
MORLEY.	Springs and shallow wells. (Bunter Pebble Beds area).
PENTRICH.	Springs and shallow wells.
QUARNDON.	Supplied by Lord Scarsdale from springs in the Bunter on Quarndon Common.
RAVENSDALE PARK.	Supplied from Springs in the Bunter Pebble Beds and from shallow wells.
SHOTTLE AND POSTERN.	Supplied from springs in the millstone grit and from wells.
SMALLEY.	Partly by Smalley Joint Water Committee, from the Belper Urban District Council, and partly by the Mapperley Colliery Company (see "Mapperley").
SOUTH WINGFIELD.	Supplied by the Local Authority from Carver Spring in the millstone grit at Dethick and raised by ram to reservoir.
TURNDITCH.	Partly by Lord Scarsdale and the remainder by shallow wells and springs. (Limestone shales area).
WESTON UNDER- WOOD (Mugginton).	From springs in the Bunter at Calder well, raised by rams.
WINDLEY.	Supplied from shallow wells and springs. (Limestone shales area).

**Blackwell.**

A comprehensive water scheme has been prepared, and the work is in progress for providing an adequate supply of water for the whole of the district. Water is being obtained from a new well to be sunk to the North-East of the village of Budby to a level of 10 ft. O.D., together with two adits of a total length of 200 yards. The water will be pumped by an 18" rising main to a new reservoir to be constructed at Stoney Houghton (500.00 ft. O.D. top water level) having a capacity of 900,000 gallons.

A new 16" main will be laid from the Stoney Houghton reservoir to near Teversal, connecting up with the existing Pleasley reservoir (100,000 gallons) on the way. From near Teversal the water will be carried forward by a 15" main to three new reservoirs at Whiteborough (east of Tibshelf) at a height of 676.00 ft. O.D., the water being re-pumped at Stoney Houghton. The storage has been arranged in three separate units in order to minimise the effect of any subsidence. (Total capacity, 525,000 gallons). The water will also be connected by a 14" main to the existing Biggin reservoir (south of Hardstoft)—capacity, 100,000 gallons, at a level of 640.00 ft. O.D. A 12" main from the Whiteborough reservoirs will connect up with the existing main at Newton, which supplies Newton, Blackwell, South Normanton and Pinxton areas.

The following summary gives the particulars of the separate parish supplies at the present time:—

AULT HUCKNALL.	Supplied by the Sheepbridge Coal and Iron Company from springs at Glapwell. Stainsby is supplied from springs and from Cade Well at Astwith. Hardwick Hall is supplied by the Mansfield Corporation.
BLACKWELL.	Supplied partly by the Local Authority and in bulk from the Sutton-in-Ashfield Urban District Council (Notts.).
GLAPWELL.	Supplied by the Sheepbridge Coal and Iron Company from springs at Glapwell.
PINXTON.	Supplied partly by Pinxton Colliery Company from springs at Suff Lane (filtered).
PLEASLEY.	Supplied by J. Warner, Esq., from springs at Pleasley, and at Rotherham Road, south of Stoney Houghton.
SCARCLIFFE.	Supplied partly by the Bolsover Urban District Council and partly by the Sheepbridge Coal and Iron Co., from springs at Whaley.
SOUTH NORMANTON.	Supplied by the Local Authority and in bulk by the Sutton-in-Ashfield Urban District Council. There has been a serious drought from time to time.

TIBSHELF. Supplied partly by the Local Authority and partly by the Mansfield Corporation.

UPPER  
LANGWITH. Supplied partly by the Shirebrook Colliery Co. from a well at Sookholme, partly by the Sheepbridge Coal and Iron Company from springs at Langwith, partly by the exors. of the late Wm. Birkett from the head waters of the River Poulter, and partly from a bulk supply of the Bolsover Urban District Council.

### **Chapel-en-le-Frith.**

10,000 gallons of water per day are supplied to various parts of this Rural District by the Derwent Valley Water Board.

ASTON. Springs.

BAMFORD. Partly by Local Authority and partly by Derwent Valley Water Board. The Local Authority supplies below the 800 feet contour from springs in Bamford Clough, issuing from the shale grit and collected in two reservoirs. Hardness low.

BROUGH AND  
SHATTON. Springs.

CASTLETON. Castleton Water Works Co., Ltd., from springs rising in the sandstone of the limestone shales at Brockett Booth Plantation, north of Castleton, and collected into a reservoir. There was a shortage in 1921.

CHAPEL. Partly by Local Authority from  
 (1) Springs issuing from the shale grit at Roych;  
 (2) From a spring to the east of Shireoaks in the Yoredale grit;  
 (3) From springs at Ridge Hall issuing from the millstone grit.

DOVEHOLES. Supplied from springs east of Hob Tor issuing from the millstone grit, collected below the surface and led to a reservoir.

CHINLEY. Partly by Local Authority, as for Chapel.

DERWENT. Springs in the millstone grit.



- EDALE. Partly supplied by L.M.S. Railway Co. A scheme has been prepared by the R.D.C. for improving this supply. It is proposed to purchase the existing works and tap a further spring yielding 28,000 gallons an hour.
- FERNILEE. Partly by Buxton Borough and by Local Authority. The Local Authority have three water schemes for this parish, partly inter-connected. The sources are in the millstone grit at Nook Farm, Lea Head, and at a point half a mile east of Fernilee.
- GREEN FAIRFIELD. Partly by Local Authority.
- HARTINGTON UPPER QUARTER. Partly by Railway Co. and Buxton Borough. The remainder by rain water meres. A scheme for the purchase and improvement of the Greensides Waterworks has been carried out for the supply of water to Harpur Hill, Sterndale Moor, and Hindlow. The total hardness is low (6.43) and the water is slightly plumbo-solvent.
- HOPE. Partly by Local Authority from a spring at Crookstone Hill issuing from the millstone grit. Hardness low.
- PEAK FOREST. Shallow wells. (Limestone area).
- THORNHILL. Springs. (Limestone shales).
- HOPE WOODLANDS. Springs from the shale grit.
- WORMHILL. By Local Authority. From springs issuing from the limestone at Wormhill Moor and pumped into a reservoir at Bole Hill. Hardness 15.4. It is proposed to instal a softening plant. Peak Dale will be supplied from this source.

### Chesterfield.

- |             |   |                       |
|-------------|---|-----------------------|
| Parts of    | } | Chesterfield Borough. |
| Brimington, |   |                       |
| Calow,      |   |                       |
| Hasland,    |   |                       |
| Tupton,     |   |                       |
| Wingerworth |   |                       |

Holmesfield, Barlow, Dronfield W'dh'se Coal Aston, Unstone, Eckington, Beighton, Killamarsh, Staveley.	} Supplied by Local Authority from the Barbrook reservoirs, 100,000,000 gallons : Ramsley Reservoir, 18,000,000 gallons ; Crowhole Reservoir, 25,000,000. From springs in the millstone grit and moorland at Topley Moss, Big Moor, Ramsley Moor, and Leash Fen. The water at Barbrook and Crowhole is filtered. Important improvements have recently been carried out at Crowhole Reservoir. The hardness is low (4.690).
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A scheme has been prepared by the Council's Water Engineer for :—

- (1) Increasing the storage capacity of the Barbrook reservoir to 143,000,000 gallons by raising the embankment 5 feet.
- (2) Constructing a water tower at Staveley 70 feet high to hold 200,000 gallons in order to balance the irregularities of day and night flow in the main and through the filters at Barbrook, which now varies from 32,000 gallons per hour to 8,000 gallons per hour, also to provide local storage.
- (3) Provide a new 4" main from the 8" main at Grange Wood to the existing 3" at Barlow village, in order to provide a supply to houses at Bole Hill and Wilkin Hill.

Temple Norm't'n, Tupton, North Wingfield, Heath, Pilsley. Stretton, Shirland & H'm, Morton.	} Supplied by Local Authority from springs collected into three reservoirs at Press. The gathering ground covers 580 acres. Hardness 9.43 parts per 100,000, being almost wholly of a permanent nature.
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ASHOVER.	Supplied by Local Authority from springs from the millstone grit at Eddlestow and the Bath Spring, Ashover. Hardness low. Yield, 36,000 gallons per day. The Eddlestow spring supply can be connected up with the Press system (which supplies the southern portion of the Rural district), as required. The Ashover spring is collected in the Bath House tank. The spring yields an average of 18,000 gallons per day. Hardness, 5.7 to 7.1 parts per 100,000.
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BRACKENFIELD.      Alfreton U.D.C. from the Lindway Water-works.

WESSINGTON.        Alfreton U.D.C. from the Lindway Water-works.

WINGERWORTH.      Partly by Chesterfield Borough and partly from the Wingerworth Estate Reservoir.

### Clowne.

Barlboro', Clowne, Elmton (part), Whitwell (part).	}	Supplied by R.D.C. and received in bulk from the Manton Colliery of the Wigan Coal and Iron Co. at Worksop. Average supply, 2,000,000 gallons per week. The total hardness is 22·4, of which 7·5 is of a temporary nature. Other parts of Elmton and Whitwell are supplied from a spring at Cuckney and a well in the Bunter at Carburton.
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### Glossop Dale.

CHARLESWORTH.    By Local Authority from Springs in the millstone grit at Cloud Farm, Hargate Hill, and a spring known as Jackson's spring collected into reservoirs. Approximate yield, 26,000 gallons per day.

CHISWORTH.        Springs.

LUDWORTH.        By Local Authority from springs in Dirty Lane collected into reservoirs at Devil's Elbow—supplies the S.W. portion of Ludworth. The springs issue from the lower Coal Measures and have a minimum supply of 22,000 gallons per day.

### Hartshorne and Seals.

HARTSHORNE.      Supplied by Local Authority from springs at the base of the Keuper in Several Wood three-quarters mile S.E. of the village. Total hardness, 25·7; permanent, 2·8. Some houses are supplied from a spring in Caulkley Wood.

TICKNALL.        Supplied by Local Authority from a well 25 feet deep in the Keuper sandstone. The water is raised by a wind pump. Springs from the limestone are also used.

CALKE.            Hall and estate. Supplied from springs in the Keuper sandstone east of the Elms.

WOODVILLE. Partly supplied by the Swadlincote and Ashby Joint Water Committee from the Milton Waterworks, and partly from a well 10 feet diameter and 91 feet deep, with four "headings" (150 yards in the Keuper sandstone) at Smisby, from which the water is pumped to an elevated tank. The water is rather hard. The well yields about 20,000 gallons per day. The hardness total is 37·23, of which 19·23 is temporary hardness.

Another spring in Several Wood has been tapped recently. The water is collected in a tank and pumped to the elevated tank near Woodville to augment the Smisby supply. The water is very hard, the total hardness being 36·78, half of which is permanent. The yield of the spring is from 40,000 to 68,000 gallons per day. This water is also used to supply part of Overseal.

NETHERSEAL. Shallow wells.

OVERSEAL. Partly supplied by Local Authority from the Smisby Well and the additional spring in Several Wood, and partly by the Moira Colliery Co., Ltd., from a spring in the Trias at Willesley Hall, Leicestershire.

## Hayfield.

HAYFIELD. Supplied by Local Authority from springs in the shale grit at Harry Moor, Kinder. Gauging 1923 : 137,000 and 1921 (min.) : 72,600 gallons per day. The total hardness is only 2·34.

MELLOR. Supplied by Local Authority from a number of independent water schemes:—

- (1) Spring from Lower Coal Measures at Tarden, Mellor. Yield, 10,000—15,000 gallons per day.
- (2) Spring from sandstone in Lower Coal Measures, near Larkhill Cottage, Mellor, near Birchenough.
- (3) Four other small springs issuing from the Lower Coal Measures.



**Norton.**

Most of the district is supplied by the Sheffield Corporation except the higher parts above the 800 feet contour.

The Local Authority uses some springs on Houndkirk Moor from the millstone grit for the supply of the higher parts of Dore. The Sheephill Spring is used for the supply of the houses in Long Line, and is reasonably satisfactory. The hardness is 4.86. In other parts, springs and shallow wells are used.

**Repton.**

Ash,	Ingleby,	} Wells.
Barton Blount,	Lullington,	
Beardwardcote,	Marston-on-Dove,	
Caldwell,	Osliston & Thnrvaston,	
Catton,	Radbourne,	
Church Broughton,	Rosliston,	
Coton-in-the-Elms,	Sutton-on-the-Hill,	
Dalbury Lees,	Trusley,	
Foremark,	Twyford and Stenson,	
Foston & Scropton,	Walton-on-Trent	
Hoon,		

**BRETBY**

Partly supplied by Derbyshire County Council, H. Wragg, Esq., and South Staffordshire Water Co. Four springs in Bretby Park issuing from glacial sand and gravel are collected into four small reservoirs. The supply can be augmented, as required, from the South Staffordshire Water Co. The spring water is rather hard and the yield variable.

**BURNASTON.****EGGINTON.****ETWALL.**

Partly by the Burton Corporation from a well 71 feet deep in the Keuper marl, near Blakely Lodge, one mile south of Etwall. Supply, 2,000 gallons per day. The remainder of these parishes are dependent upon wells. The geological formation for this area is alluvium.

**Castle Gresley,****Drakelow,****Findern,****Linton,****Newton Solney,****Repton (except Milton village),****Willington.**

} South Staffordshire Water Co.

**HATTON.**

Partly by Tutbury R.D.C. (Staffs.) and the remainder from wells.

**HILTON.**

Wells used mainly, but there is a piped supply to eight houses owned by the Hilton Gravel Co.

MICKLEOVER.

Derby Corporation.

MILTON, a village in Repton parish, is supplied by the Swadlincote and Ashby Joint Water Committee from their Milton Waterworks.

**Shardlow.**

Aston-on-Trent,  
Breaston (part),  
Chellaston,  
Draycott (part),  
Elvaston,  
Ockbrook,  
Borrowash,  
Shardlow,  
Sandiacre.

Derwent Valley Water Board  
(130,000 gallons per day).

Breadsall,  
Chaddesden,  
Littleover,  
Little Eaton,  
Spondon.

Derby Corporation.

Dale Abbey (part), By Local Authority from the Stanley Pit of  
Stanley, the Mapperley Colliery Co. 100,000 gal-  
West Hallam. lons per day. Hardness after softening is  
33·15. A feeder in the shaft at 300 feet  
down is tapped.

Kirk Hallam, } From Ilkeston and Heanor Water Board, with  
Stanton-by-Dale. } a pumping station for the supply to Stanton-  
by-Dale.

Melbourne, By Local Authority from boreholes 225 feet  
Derby Hills. deep in the millstone grit at Melbourne.  
The water is pumped to high and low level  
reservoirs. The total hardness is 20·9 of  
which 11·42 is permanent.

Risley, By Local Authority from the Sandiacre and  
Sandiacre. Stapleford Waterworks, consisting of a  
borehole 140 feet deep in Bunter sandstone.  
Total hardness 23° of which 7° is permanent.

Sawley, By Long Eaton U.D.C.  
Stanton.

**Sudbury.**

DOVERIDGE.

By Local Authority. New piped supply laid  
in 1930. The water is received by meter  
from the Somersal Herbert supply of the  
Uttoxeter U.D.C. The water issues from  
the glacial sand and gravel formation.

A recent analysis of the water shows the total hardness to be 11·5, of which 10·0 is permanent. There were marked traces of iron present, but this may be due to the new pipes and the fact that until more connections are made to the mains several "dead ends" exist.

SUDBURY. By Sudbury Estate Waterworks. From springs at Alder Moor Wood and Sudbury Coppice in the glacial sand and gravel formation, estimated yield being 10,000 and 20,000 gallons per day respectively.

NORBURY AND ROSTON. From a borehole in the Keuper sandstone, which supplies Norbury. There is also a bore at Norbury Farm, 125 feet deep—450 gallons per hour. Roston relies on a spring from the glacial beds near the Chapel.

Cubley,	}	Springs.
Marston		
Montgomery,		
Boyleston.		

#### RIVER POLLUTION AND SEWAGE PURIFICATION.

The conditions existing at the present time in the various Sanitary Districts in the County and the extensions and improvements carried out during 1930 are as set out below:—

ALFRETON URBAN.—The whole of the district is sewered, except a few outlying premises.

There are sewage disposal works at Highfield, Meadow Lane (two), Swanwick, Greenhill Lane, Newlands Road, Somercotes, and Pye Bridge.

At Ironville there is no treatment of the sewage other than by dilution, in wet weather.

An additional filter was constructed at both Highfield and Greenhill Lane during 1930.

ALVASTON AND BOULTON URBAN.—A brook known as the Party Nook Brook receives the storm overflow from one of the main sewers of the Derby Corporation.

Most of the houses drain into the Borough sewers, but there is a small tank and filter to deal with the drainage of 55 houses.

A new sewer extension has been carried out in Boulton Lane.

ASHBOURNE URBAN.—The sewerage of this district is complete except for one outlying area. The present sewage disposal works are still overtaxed, and extensions are badly needed. Better means of dealing with storm water are required.

BAKEWELL URBAN.—No sewage works have yet been provided for Bakewell, which has a population of approximately 3,000. The bulk of the sewage passes by means of an underground culvert and open ditch to the River Wye, and causes pollution, especially in times of storm. The sewage is diluted to a great extent by subsoil and river water, but in times of storm the culvert discharges quantities of fungus and sludge which has accumulated in the culvert.

A scheme has been prepared, but there are objections to the site chosen, and nothing further has been done.

Owing to the contour of the land, the only position for sewage works consisting of tanks only is somewhere alongside the River Wye, but if filters are required the sewage would have to be pumped.

At any site other than alongside the river, pumping will be necessary, and unless the sewage were separated from the subsoil water, an enormous quantity of liquid would have thus to be dealt with

BASLOW URBAN.—No sewage treatment is adopted other than a small disposal works, consisting of a covered tank and filter without distributors, for the houses erected by the Urban District Council. There are two points where sewers discharge into the river Derwent—one near the Church and the other near the gas works.

BELPER URBAN.—Certain outlying districts are now being sewered and connected up with the main system. A scheme for enlarging and improving the existing sewage works has been submitted to the Ministry of Health.

Following a complaint made to the Urban District Council, the working of the sewage ejectors is now being carried on day and night.

A scheme is in progress for providing an electric automatic air compressor for working the five ejectors in place of one of the gas engines. This arrangement makes it possible to work the air compressor either by gas, steam, or electricity.

BOLSOVER URBAN.—There are three sewage disposal works for the district—one for Bolsover proper, one at Carr Vale, and the other at Shuttlewood. The filters at Carr Vale and Shuttlewood have been renovated.

The sewage from the Langwith area of the district is now being dealt with at the new joint sewage works constructed in conjunction with the Blackwell Rural District Council and the Worksop Rural District Council.

During the year the Stanfree sewage scheme was completed.



BONSALL URBAN.—The sewage of this district for the most part still passes into a small stream which flows through the village. A nuisance is caused where the stream passes through the grounds of the residence known as the "Cascades." Proper sewage works are necessary for this district.

BRAMPTON AND WALTON URBAN.—This district is practically sewered throughout, and there are sewage works at Holymoorside and at Cutthorpe.

BUXTON (BOROUGH).—The sewage of this area is treated in tanks, roughing filters and percolating filters. A new sludge pressing plant has been installed.

CHESTERFIELD (BOROUGH).—Practically the whole of this area is sewered, and the sewage is treated at one outfall at Whittington on the activated sludge principle.

The disposal works are to be extended by the provision of a fourth bio-aeration unit and several sludge digestion tanks. At present there is difficulty in properly treating all the sewage in dry weather owing to the amount of trade waste which enters the sewers. The scheme has received the sanction of the Ministry of Health.

CLAY CROSS URBAN.—There are three sewage disposal works in this district—one at Bacon Springs, one at Danesmoor, and another at Long Rows. The filtering media at Bacon Springs and Danesmoor has been renewed and the design of the tanks improved. The works at Long Rows are maintained by the Clay Cross Co., and consist of tanks and an obsolete design of filter. These works need improvement.

DRONFIELD URBAN.—Most of the houses in this district are sewered, and the disposal works have been improved by the provision of an additional filter, an extra humus tank, and sludge beds.

GLOSSOP (BOROUGH).—The disposal works are fairly satisfactory, but difficulty arose during the storms of 1930 when a road bridge was washed away, carrying with it the main sewer. Until repairs could be carried out, the sewage had to be passed to the river, but the sewage was screened before doing so.

HEAGE URBAN.—There is a scheme at present in progress to deal with most of the sewage in this district. New works are completed at Upper Heage and Nether Heage, and work on the Saw Mills area pumping station is in progress.

It is proposed to relieve the old works at Ambergate of about half the present flow, and provide a pumping station to raise the remainder of the sewage to new disposal works, which will also receive the Saw Mills sewage.

The "Green Man" area drains to a small sewage disposal plant, which is unsatisfactory.

HEANOR URBAN.—The Cross Hill sewage works deal with the sewage from Tanners Lane and from Waingroves in the Ripley Urban District.

A scheme is in progress for abolishing the Commonsides, Loscoe, and Woodend sewage works and taking the sewage to Langley Mill, where the old works will be superseded by a new plant.

At Stoneyford there is a small disposal plant.

There will, in future, be three disposal works instead of eight.

ILKESTON (BOROUGH).—The present sewage works, constructed in 1912, are about to be extended by the provision of an extra set of four filters and further sewers. The scheme has been sanctioned by the Ministry of Health.

LONG EATON URBAN.—There are sewage works at Toton and at Sawley. The sewage at Sawley is pumped to the Sawley works, the use of which is shared with Shardlow Rural District Council for the area of Old Sawley.

MATLOCKS URBAN.—The pumping station at Knowlestone Place has been improved and the work of laying subsidiary sewers and extensions of sewers is in progress. This will remove several sources of pollution of the River Derwent.

NEW MILLS URBAN.—The sewage disposal works are of recent construction.

NORTH DARLEY URBAN.—The only attempt made to deal with the sewage of this district is at Churchtown, and this is by covered tanks only. At Deeley Town and Two Dales the sewage passes direct into the River Derwent and the Warney Brook respectively.

A comprehensive scheme is desirable.

RIPLEY URBAN.—The Waingroves sewage is treated at the Cross Hill works of the Heanor Urban District Council. The sewage of most of the remainder of the district is dealt with at Ripley Northern, Ripley Southern, Marehay, and Street Lane works.

At Ripley Northern sewage works the filters have been renovated and two new filters provided, together with a humus tank. Considerable trouble has arisen at these works from time to time, owing to subsidence due to colliery workings. It is proposed to provide new works to deal with the Hartshay area and to relieve the Northern works.

SOUTH DARLEY URBAN.—The sewage here discharges into the River Derwent after passing through a detritus tank only.

SWADLINCOTE URBAN.—There are sewage works at Stanton and Cappy Lane. The Stanton works have been improved and sludge beds provided. There are no filters at either place, the tank effluent being passed over land, the works at Stanton being run as a farm.

WIRKSWORTH URBAN.—The bulk of the sewage is treated at disposal works. There are several houses, however, which are not yet connected up with the sewers. The sludge in the storm water tanks at the sewage works is not removed, except at long intervals, and the sludge bed accommodation is unsatisfactory.

The works will probably be extended so as to treat the sewage of Middleton-by-Wirksworth (Ashbourne Rural District).

### **Ashbourne Rural.**

BRAILSFORD.—Sewage works are provided, but need attention.

HARTINGTON.—Small sewage works ; the sewage is very dilute, except in dry weather.

TISSINGTON.—Small sewage works ; not very satisfactory.

THORPE.—The two hotels have private installations.

PARWICH.—The sewers discharge into the local brook, which is unsatisfactory.

CLIFTON.—The sewage is collected in septic tanks with overflows.

KNIVETON.—Several houses drain to brook.

LONGFORD, HOGNASTON, KIRK IRETON, HULLAND, HOLLINGTON, YEAVELEY, EDNASTON, ATLOW.—The sewage is discharged on to land.

MAPLETON.—The drainage is discharged into a tank with overflow, or into a ditch.

MIDDLETON-BY-WIRKSWORTH.—There are two outfalls discharging into old lead mine shafts. This is unsatisfactory, as the area is the gathering ground of a large public water supply. A scheme is prepared for taking this sewage to Wirksworth, the adjoining Urban District, and extending the sewage works there to deal with it.

The other villages or hamlets not mentioned above have no sewers, and the premises are drained either into cesspools or on to the land.

### **Bakewell Rural.**

HATHERSAGE.—Tanks and land treatment. Effluent discharges into River Derwent.

LITTLE LONGSTONE.—Tank and land treatment. Effluent disappears.

**GREAT LONGSTONE.**—Tank and land treatment. A scheme has been prepared for providing proper sewage works here.

**STONEY MIDDLETON.**—Tank and land treatment. Effluent discharges into brook.

**TIDESWELL.**—Tanks, filters and land treatment. The works are not satisfactory and pollution of the brook occurs. Revolving sprinklers are required.

At Eyam, Ashford, Youlgreave, Eyam Woodlands, Bradwell, and Calver, sewage schemes are necessary.

**Basford Rural.**—There are sewage works at Forge Row and Shipley Common.

**Belper Rural.**—The following villages have their own sewage works :—Allestree, Crich, Darley Abbey, Denby and Kilburn, Duffield, Holbrook, Horsley, Horsley Woodhouse, Mapperley, Openwoodgate, Quarndon, Smalley, Smalley Common, Smithy Houses, South Wingfield, and Whatstandwell.

**Blackwell Rural.**—There are sewage works at B. Winnings, Berristow Place, Birchwood Lane, Brookhill Lane, Carnfield, Doe Lea, Langwith, Newton, New Houghton, Pleasley, Pinxton Green, Pinxton Wharf, Primrose Hill, Searcliffe, Shirebrook, South Normananton, Tibshelf, Westhouses North and Westhouses South.

The work carried out during the past year is as follows :—

Birchwood Lane—new works ; old works now used for storm water.

Brookhill Lane—works improved and renovated.

Westhouses North—works renovated.

Westhouses South—works renovated.

**Chapel-en-le-Frith Rural.**—Sewage works exist at Bamford, Castleton, Chapel, Chinley, Bugsworth, and Fernilee. There is a small plant for a portion of Dove Holes. A scheme has been prepared for sewerage and sewage disposal at Hope.

**Chesterfield Rural.**—A new activated sludge plant was installed at Staveley in 1929. This superseded old sewage works at Mill Green, Poolsbrook, Hollingwood, Troughbrook, and Netherthorpe ; also, sewage tanks at Barrow Hill, Ringwood, Hartington, Seymour, Mastin Moor, Lowgates, New Brimington, and Duckmanton.

New sewage works have been constructed during the past year at Grassmoor Colliery Pit Head Baths, Hackenthorpe (two), and Shirland and Higham.



New schemes are being prepared for North Wingfield area and New Tupton.

There are sewage works at the following places in addition to those mentioned above :—Apperknowle, Arkwright Town, Barlow, Beighton (two), Calow Alley, Calow Village, Eckington, Grassmoor, Halfway, Hepthorne Lane, Hillyfields, Highmoor, Killamarsh, Mastin Moor Hospital, Morton, Mosborough, New Tupton, Pilsley, Pilsley Station, Stonebroom, Tapton Grove, Temple Normanton, Troway, Wessington, Wheeldon Mill (two), Williamthorpe (two), and Winsick.

There are sewage tanks at Brimington Common, Coal Aston, Dronfield Woodhouse, Ford Lane, Back Lane (Mosborough), Parkhouse Green, Ridgeway, Stubbley, Siscar, Unstone Green, and West Handley.

The sewage of Ashover for the main part enters a fissure or fault in the ground, emerges at Old Woman's Well, entering the River Amber fairly well diluted in wet weather.

**Clowne Rural.**—There are sewage works at Barlborough, Clowne, Creswell, Hodthorpe, and Whitwell, with tanks at Mount Pleasant and West Lea. The latter is unsatisfactory.

The Whitwell works have been improved by the addition of revolving sprinklers, and it is stated schemes are being prepared for improving certain sewage works in the area.

**Glossop Dale Rural.**—Sewage works are contemplated at Charlesworth. The sewage of Gamesley is to be taken into Glossop Borough sewers. Sewer extensions have been carried out at Ludworth and Mellor.

**Hartshorne and Seals Rural.**—At Overseal a new sewage disposal scheme is in progress which will do away with three obsolete works or tanks.

There are sewage works at Woodville.

**Hayfield Rural.**—The sewage of Hayfield is treated at sewage works in the district. Mellor sewage is treated at the joint sewage works at Ludworth.

**Norton Rural.**—Totley Grove has been sewered and the sewerage is now taken by Sheffield Corporation, the Totley Grove sewage works being abolished. There are two small sewage works at Totley Rise, which are unsatisfactory. A scheme has been prepared for dealing with this area—Bradway Bank and part of Totley. There is a private installation at Batemoor Cottages, which is unsatisfactory.

**Repton Rural.**—There are sewage works at Repton, Mickleover County Mental Hospital, Etwall, Etwall Isolation Hospital, Coton Park, Linton North, Milton, and Repton.

Sewage tanks are provided at Linton South, Castle Gresley, Mount Pleasant, Hatton, Hilton, and Scropton.

Castle Gresley and Willington are both in need of a proper sewage disposal scheme.

The sewage of other small villages is generally taken to cesspools or into ditches.

**Shardlow Rural.**—New sewage works have been provided at the following places during the past year:—Chellaston, Sandiacre, and West Hallam.

At Little Eaton, the work of extension is in progress to deal with the sewage of Breadsall, also certain sewer extensions at Little Eaton have been sanctioned. Spondon works have been enlarged. Risley has been sewered, the sewage being treated at Sandiacre. Enlargement of the sewage works is proposed at Chaddesden, Breaston and Draycott, and Spondon.

A scheme has been prepared for re-modelling the Melbourne works, and a scheme has been sanctioned for Shardlow and Aston.

Certain sewer extensions have been sanctioned for Sandiacre.

Old Sawley sewage is pumped to the Sawley sewage works, now under the charge of the Long Eaton Urban District Council.

Littleover sewage is connected with the Derby Corporation sewers.

In addition to the above-named works, there are also sewage works for Ockbrook and Borrowash, Stanley, Stanley Common, and Stanton-by-Dale.

There are sewage outfalls at Barrow-on-Trent, Elvaston, Sinfen Moor, and Weston-on-Trent.

**Sudbury Rural.**—There are sewage works at Sudbury and Doveridge. The works at the latter place have been overhauled, but appear to be adversely affected by a quantity of liquid manure from a pig-breeding place.

#### EFFLUENTS.

During the year 1930, 457 samples of sewage effluents were collected. The samples were classified as follows:—

Good	...	...	...	261
Satisfactory	...	...	...	119
Unsatisfactory	...	...	...	48
Bad	...	...	...	29

In addition to these samples, 56 other visits were paid to sewage works for purposes other than the taking of samples, and 35 visits were paid to various manufacturers *re* trade wastes.

In the case of sewage effluents, the results of the analyses are given to the Engineer or Surveyor concerned, and, where necessary, special letters are sent pointing out defects existing at the works or making suggestions for effecting an improvement in the condition of the final effluents.

TABLE XXXI.

## CLOSET ACCOMMODATION.

Districts.	Approximate number of Houses with				Number of Conversions.	
	Privy Middens.	Pail Closets	Water Closets	Trough and slop Water Closets	From Privy-middens to water Closets	From Pail-Closets to water Closets
<b>URBAN.</b>						
Alfreton ...	86	2,614	3,042	43	1	6
Alvaston & Boulton	30	4	720	—	50	1
Ashbourne ...	12	—	883	300	3	—
Bakewell ...	183	51	494	—	5	—
Baslow ...	116	4	220	—	1	—
Belper ...	84	489	2,395	127	—	48
Bolsover ...	433	734	1,579	5	167	94
Bonsall ...	66	232	20	—	1	2
Brampton & Walton	327	23	197	—	—	—
Buxton (Boro')	13	70	3,428	1	—	—
Chesterfield (Boro')	227	80	14,673	290	2	1
Clay Cross ...	744	—	1,155	12	197	—
Dronfield ...	295	—	802	16	27	—
Glossop (Boro')	5	55	3,544	479	—	—
Heage ...	201	444	233	8	—	11
Heanor ...	526	2,060	3,222	—	202	277
Ilkeston (Boro')	16	218	7,081	313	—	165
Long Eaton ...	14	77	6,360	74	—	—
Matlocks ...	438	317	1,884	2	14	—
New Mills ...	112	—	954	560	47	—
North Darley ...	327	11	646	112	4	—
Ripley ...	227	1,049	2,067	—	22	77
South Darley ...	119	53	55	—	—	—
Swadlineote ...	75	10	All the	remainder.	112	8
Wirksworth ...	267	44	725	4	27	—
<b>RURAL.</b>						
Ashbourne ...	1,050	1,020	337	13	6	—
Bakewell ...	2,119	1,156	902	—	18	1
Basford ...	8	254	152	—	—	4
Belper ...	439	2,843	2,450	3	36	104
Blackwell ...	1,210	5,496	2,878	—	22	23
Chapel-en-le-Frith	1,382	485	2,744	6	6	2
Chesterfield ...	8,854	380	9,071	93	636	—
Clowne ...	1,841	1,408	968	—	17	5
Glossop Dale ...	295	63	459	12	7	—
Hartshorne & Seals	389	118	548	13	17	2
Hayfield ...	422	47	861	—	7	13
Norton ...	237	83	1,591	—	45	—
Repton ...	1,964	520	1,649	6	84	6
Shardlow ...	1,122	2,842	5,598	29	78	66
Sudbury ...	—	No information.	—	—	—	—



**SCAVENGING.**

The following Table shows how scavenging is undertaken in the various Districts of the County :—

**URBAN DISTRICTS.**

Alfreton.	By Council.
Alvaston and Boulton.	By Council.
Ashbourne.	By Council.
Bakewell.	By Council, except a few outlying farms.
Baslow.	By Occupiers.
Belper.	Part by Council, part under Contract.
Bolsover.	By Council.
Bonsall.	By Council.
Brampton and Walton.	Holymoorside by Contract, the remainder by the Council.
Buxton.	96% by Council, 4% under Contract.
Chesterfield (Borough).	By Council.
Clay Cross.	By Council and Contractor.
Dronfield.	By Council.
Glossop (Boro').	By Council.
Heage.	By Council, except Nether Heage, which is carried out under Contract.
Heanor.	By Council.
Ilkeston (Boro').	Under Contract.
Long Eaton.	By Council.
Matlocks.	By Contract.
New Mills.	By Council.
North Darley.	By Council.
Ripley.	By Council, except Butterley Park, which is done by the Butterley Company.
South Darley.	By Council.
Swadlincote.	By Council.
Wirksworth.	By Council.

**RURAL DISTRICTS.**

Ashbourne.	By Council at Parwich and Clifton. Tips provided for Hartington, Brassington, and Shirley, and emptied by Council.
Bakewell.	Ashford, Bradwell, Calver, Eyam, Hathersage, Grindleford, Birchover, Stanton-in-Peak, Tideswell, Winster. Under Contract. Beeley by Estate Owner.

Basford.	Codnor Park by Butterley Company. Shipley by Contract.
Belper.	Allestree and Duffield by Council. Denby, Dethick, Lea and Holloway, Kilburn, Mapperley, and South Wingfield. Under Contract. Holbrook and Horsley Woodhouse by Occupiers.
Blackwell.	South Normanton, Blackwell, Shirebrook, and part of Pleasley. By Council. Pinxton, Tibshelf, and part of Pleasley. Under Contract. Ault Hucknall, Glapwell, Scarcliffe, and Upper Langwith. By private owners.
Chapel-en-le-Frith.	Part of Chapel, Chinley, Bugsworth, and Brownside. By Council. Bamford, parts of Chapel and Harpur Hill, under Contract.
Chesterfield.	By Council—part of Eckington, Hasland, Kilamarsh, North Wingfield, Pilsley, Staveley, Temple Normanton, Unstone. Under Contract—Ashover, Barlow, Beighton, Brimington, Calow, Coal Aston, Dronfield, Woodhouse, part of Eckington, Heath, Holmesfield, Morton, Shirland & Higham, Sutton-cum-Duekmanton, Tupton, Westington. By Occupiers—Brackenfield, Stretton, Wingerworth, Woodthorpe.
Clowne.	Under Contract.
Glossop Dale.	Public scavenging in Ludworth.
Hartshorne and Seals.	Under Contract.
Hayfield.	Hayfield by Council. Mellor, under Contract.
Norton.	By Council.
Repton.	Castle Gresley, Linton, Hatton, Foston and Seropton, Mickleover. Under Contract.
Shardlow.	Melbourne by Council, remainder by Contract.
Sudbury.	No public scavenging in district.

URBAN DISTRICTS.

District and Sanitary Inspector's Name.	Closets and Ashpits.								Drainage.			Other Defects.												Totals.				
	Defective Privies, Pail Closets and Ashpits.	Conversion of Privies into W.C.'s.	Conversion of Pail Closets into W.C.'s.	Conversion of Privies into Pail Closets.	Defective W.C.'s.	Provision of additional W.C.'s.	Provision of Portable Ashbins.	Dirty Closets.	No disconnection of Waste Pipe.	Defective Waste Pipes, Traps, Inlets & Drains.	Drains obstructed.	Paving of Courts or Yards.	Roofs, Eaves Spouts, and Down Spouts.	Sinks.	Insufficient Ventilation.	Windows.	Dampness.	Water in Cellars.	Water Supply.	Overcrowding.	Foul Condition of Houses.	Offensive Accumulations.	Animals improperly kept.		Pigsties.	Smoke Nuisances.	Urinals.	Nuisances not specified above.
Alfreton J. Spencer.	40	1	6	1	6	11	69	2	...	10	20	6	44	3	1	9	14	1	...	5	2	11	2	1	4	...	100	369
	7	1	...	...	2	...	8	...	1	...	...	1	12	...	...	4	2	1	...	...	5	...	...	...	...	...	6	51
	50	1	6	1	6	11	70	...	...	11	30	7	...	6	...	15	18	1	...	1	2	12	2	1	6	...	150	407
Alvaston and Boulton R. C. Treadgold.	...	31	...	...	3	...	17	...	...	10	39	4	3	5	...	2	4	2	...	...	...	1	3	2	...	...	9	135
	...	29	...	...	...	...	5	...	...	...	7	2	3	...	...	...	4	...	...	...	...	...	...	...	...	...	8	58
	...	57	...	...	3	...	12	...	...	8	42	4	3	5	...	...	4	2	...	...	...	1	3	2	...	...	4	150
Ashbourne D. Powell.	9	1	...	...	9	17	1	1	...	3	4	6	7	15	14	10	11	...	30	...	...	1	...	...	1	...	35	176
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	9	1	...	...	10	17	4	3	...	7	10	6	...	15	14	10	11	...	56	...	...	1	...	...	1	...	47	230
Bakewell T. W. Baker.	4	...	...	...	1	...	7	...	...	19	14	...	2	1	...	...	6	...	1	...	...	...	...	...	...	...	2	57
	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	4
	10	5	...	...	2	...	7	...	...	19	14	...	...	1	...	...	6	...	2	...	...	...	...	...	...	...	3	71
Baslow J. Baggaley	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	1	2	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...	10

**URBAN DISTRICTS**—*continued.*

<b>Belper</b>	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	...	...	52	...	18	...	30	55	1	52	30	52	24	4	10	10	3	1	...	...	6	...	...	4	...	35	387
J. A. Statham.	...	...	...	11	...	...	...	...	...	...	12	...	...	...	2	...	4	...	...	...	...	...	...	...	...	...	...	29
	...	...	...	48	...	18	...	30	55	...	48	30	48	24	4	10	10	2	1	...	...	6	...	...	4	...	35	373
<b>Bolsover</b>	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	3	34	20	...	6	...	10	1	...	6	10	2	5	2	...	1	2	...	1	...	1	1	...	...	1	23	130
E. Booth.	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	2
	...	10	167	94	...	30	2	248	1	...	19	96	3	13	4	...	5	5	...	3	...	3	1	...	...	2	258	967
<b>Bonsall</b>	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	5	...	...	7	...	...	...	3	...	4	3	...	3	1	...	...	...	4	...	...	...	...	...	...	...	15	45
A. Allsopp.	...	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
	...	7	...	...	9	...	...	...	3	...	6	5	...	7	2	...	...	...	7	...	...	...	...	...	...	...	15	61
<b>Brampton and Walton</b>	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	2	4	...	...	...	...	...	...	...	10	2	3	23	2	...	7	10	...	...	...	3	1	...	...	...	...	67
W. J. Nicholls.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
	...	2	4	...	...	...	...	...	...	...	...	2	3	10	1	...	1	3	...	...	...	3	1	...	...	...	...	38
<b>Buxton (Boro')</b>	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	...	...	...	...	31	3	38	7	1	...	81	21	7	6	...	19	3	...	1	...	6	...	...	...	4	14	248
W. O. Coates.	...	34	...	...	...	...	...	115	...	...	10	19	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	179
	...	34	...	...	...	31	3	179	7	1	82	204	33	14	6	...	27	3	...	1	...	6	...	...	1	4	20	663
<b>Chesterfield (B.)</b>	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	...	4	1	...	66	15	144	8	...	72	167	62	114	22	...	30	35	9	1	8	25	12	1	20	3	146	993
A. S. Carter.	...	...	1	1	...	9	8	15	...	...	13	7	29	5	5	...	5	1	3	...	2	1	1	...	3	...	112	222
	...	...	2	1	...	64	42	183	8	...	91	171	96	169	27	...	25	38	10	3	4	22	12	1	4	...	223	1228
<b>Clay Cross</b>	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	3	29	...	...	20	3	29	...	...	37	29	3	17	3	1	5	7	2	9	...	1	2	...	...	21	...	229
W. A. T. Lynam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	11	197	...	...	20	3	198	...	...	206	135	17	73	5	2	...	20	2	9	...	...	...	...	...	...	...	980



District and Sanitary Inspector's Name.	Closets and Ashpits.							Drainage.				Other Defects.																			
	Defective Privies, Pail Closets and Ash pits.	Conversion of Privies into W.C.'s.	Conversion of Pail Closets into W.C.'s.	Conversion of Privies into Pail Closets.	Defective W.C.'s.	Provision of additional W.C.'s.	Provision of Portable Ashbins.	Dirty Closets.	No disconnection of Waste Pipe.	Defective Waste Pipes Traps, Inlets & Drains.	Drains obstructed.	Paving of Courts or Yards.	Roots, Eaves Spouts, and Down Spouts.	Sinks.	Insufficient Ventilation.	Windows.	Dampness.	Water in Cellars.	Water Supply.	Overcrowding.	Foul Condition of Houses.	Offensive Accumulations.	Animals improperly kept.	Pigsties.	Smoke Nuisances.	Urinals.	Nuisances not specified above.	Totals.			
Dronfield W. A. Parry	Informal Notices served by Sanitary Inspector ...	20	27	...	...	25	2	67	2	17	42	9	23	8	...	16	22	1	97	1	4	1	...	...	...	1	4	9	398	15	
	Legal Notices served by Local Authority ...	...	9	...	...	25	2	67	2	17	42	...	23	8	...	16	7	...	...	1	...	...	...	...	1	...	...	27	15		
Glossop (Boro') H. Dane.	Informal Notices served by Sanitary Inspector ...	87	...	...	...	37	2	177	9	43	38	...	...	72													2	4	14	527	...
	Legal Notices served by Local Authority ...	...	...	...	...	...	9	...	...	...	...	...	...	45	...	...	...	...	...	...	...	...	...	...	...	...	...	54	...		
Heage A. J. Fortnam.	Informal Notices served by Sanitary Inspector ...	21	11	11	...	8	...	3	...	4	4	...	2	4	...	1	5	...	8	...	...	4	...	...	...	...	...	86	...		
	Legal Notices served by Local Authority ...	...	11	...	...	6	...	...	...	1	...	1	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	22	...		
Heanor A. A. Wilson	Informal Notices served by Sanitary Inspector ...	66	8	11	...	10	4	56	2	31	20	35	48	22	3	17	19	1	11	3	6	2	6	5	4	2	61	453	...		
	Legal Notices served by Local Authority ...	...	202	277	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2	...	1	...	...	...	1	...	...	2	487	...	
	Nuisances abated ...	66	202	277	...	10	4	289	2	75	20	50	55	21	3	30	18	1	15	2	9	2	6	5	4	2	102	1280	...		

**URBAN DISTRICTS—continued.**

Ilkeston (Boro')	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	52	...	14	...	44	75	59	12	24	25	139	24	46	17	9	15	29	4	...	2	7	5	3	30	3	186	824	
		5	...	14	...	...	75	4	...	...	...	...	1	...	5	...	...	...	...	...	...	...	...	...	1	...	...	30	
		52	...	170	...	44	75	153	12	24	25	139	24	46	17	9	12	22	4	...	...	2	7	5	3	25	3	180	1053
Long Eaton J. Tomlinson.	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	5	...	...	...	31	2	384	15	...	42	134	22	33	1	5	5	2	3	2	4	6	21	19	3	31	1	236	1007
		...	...	...	...	...	...	8	...	...	...	...	...	4	7	...	...	...	...	...	...	...	...	...	1	...	39	59	
		7	...	...	...	61	5	423	21	...	127	162	84	108	38	90	35	7	3	26	6	...	35	11	3	41	1	517	1817
Matlocks J. D. Evans.	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	17	14	...	9	5	...	12	4	...	64	30	...	...	...	...	2	...	...	1	...	3	...	...	...	1	19	181	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		17	14	...	9	5	...	...	12	4	...	60	30	...	...	...	...	...	...	...	...	...	3	...	...	...	...	17	171
New Mills W. C. Sheard	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	1	...	...	...	...	...	32	1	...	2	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	39	122
		...	15	...	...	...	...	...	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	18	
		1	47	...	...	15	...	169	1	...	28	25	9	...	...	...	...	1	3	1	...	...	1	...	...	...	...	...	301
North Darley W. G. Woolley.	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	16	4	...	...	56	...	75	1	...	10	8	23	13	1	...	2	6	2	...	1	...	...	...	...	...	...	218	8
		...	2	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	142
		...	4	...	...	32	...	75	1	...	2	6	11	8	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...
Ripley W. E. Clark.	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	65	23	75	...	10	2	60	...	1	56	54	12	26	11	...	21	13	10	18	7	4	2	8	4	3	1	49	535
		...	6	19	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	27
		51	22	77	...	10	2	35	...	1	43	49	53	16	11	...	...	24	6	8	...	4	2	7	4	2	1	34	470
South Darley H. Crowder.	Informal Notices served by Sanitary Inspector ... Legal Notices served by Local Authority Nuisances abated	300	...	...	...	1	...	...	...	...	12	...	...	3	...	...	...	...	...	1	...	6	...	...	...	...	...	323	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	1	...	...	...	...	...	12	...	...	3	...	...	...	...	...	1	...	...	...	6	...	...	...	323

District and Sanitary Inspector's Name.	Closets and Ashpits.					Drainage.			Other Defects.													Totals.								
	Defective Privies, Pail Closets and Ashpits.	Conversion of Privies into W.C.'s.	Conversion of Pail Closets into W.C.'s.	Conversion of Privies into Pail Closets.	Defective W.C.'s.	Provision of additional W.C.'s.	Provision of Portable Ashbins.	Dirty Closets.	No disconnection of Waste Pipe.	Defective Waste Pipes, Traps, Inlets & Drains.	Drains obstructed.	Paving of Courts or Yards.	Roofs, Eaves Spouts, and Down Spouts.	Sinks.	Insufficient Ventilation.	Windows.	Dampness.	Water in Cellars.	Water Supply.	Overcrowding.	Foul Condition of Houses.		Offensive Accumulations.	Animals improperly kept.	Pigsties.	Smoke Nuisances.	Urinals.	Nuisances not specified above.		
Swadlincote G. Pollard.	49	93	8	...	...	2	238	6	...	13	7	13	137	5	34	32	60	...	1	...	...	5	...	...	...	...	1	332	1063	
Wirksworth A. E. Parry.	12	27	...	...	...	...	23	...	...	52	16	3	13	2	...	...	2	...	28	9	1	...	1	...	...	...	...	1	51	186
	22	...	...	...	5	...	23	...	...	53	16	3	13	3	...	...	4	2	28	1	...	1	...	...	...	...	40	214	521	
	...	40	...	...	...	...	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Ashbourne J. H. Wheeldon.	11	6	...	...	...	...	20	...	...	4	...	4	14	4	4	6	2	...	9	2	2	1	19	...	...	...	1	...	131	
	3	1	...	...	...	...	...	...	...	4	...	...	...	1	...	7	1	...	1	2	1	1	...	...	...	...	...	...	21	
	8	5	...	...	1	...	20	1	4	20	...	4	14	7	7	8	5	...	10	...	...	...	19	...	...	...	1	...	134	
Bakewell A. Seaton. A. Green.	40	18	1	18	15	21	28	19	11	68	73	6	69	15	15	12	12	3	38	4	...	3	50	1	...	...	3	40	598	
	4	...	...	1	...	4	...	...	1	6	...	2	3	2	1	2	...	...	11	...	...	...	9	...	...	...	6	...	49	
	...	...	...	...	...	...	28	19	11	68	73	6	58	13	11	7	10	2	38	3	...	3	50	1	...	...	...	38	558	



## RURAL DISTRICTS—continued.

[illegible]



District and Inspector's Name.	Closets and Ashpits.								Drainage.				Other Defects.										Totals.						
	Defective Privies, Pail Closets and Ashpits.	Conversion of Privies into W.C.'s.	Conversion of Pail Closets into W.C.'s.	Conversion of Privies into Pail Closets.	Defective W.C.'s.	Provision of additional W.C.'s.	Provision of Portable Ashbins.	Dirty Closets.	No disconnection of Waste Pipe.	Defective Waste Pipes, Traps Inlets & Drains.	Drains obstructed.	Paving of Courts or Yards.	Roofs, Eaves Spouts, and Down Spouts.	Sinks.	Insufficient Venti- lation.	Windows.	Dampness.	Water in Cellars.	Water Supply.	Overcrowding.	Foul Condition of Houses.	Offensive Accumu- lations.		Animals improperly kept.	Pigsties.	Smoke Nuisances.	Urinals.	Nuisances not specified above.	
Hartshorne & Seals J. Crabtree	10	12	2	2	8	11	12	3	2	2	10	12	14	2	5	12	15	...	3	4	1	14	...	...	...	...	1	15	172
	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	9	...	...	...	...	...	...	...	...	3
	12	17	2	2	14	11	47	3	5	2	10	12	43	2	5	22	42	...	...	...	1	...	...	...	...	...	1	10	286
Hayfield. E. Swift.	...	7	13	...	5	...	3	...	...	19	7	...	2	1	...	...	2	2	7	...	...	1	...	...	...	...	1	...	70
	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	7	...	...	...	...	...	...	1	...	11	
	...	7	13	...	5	...	1	...	...	17	7	...	2	1	...	...	2	2	7	...	...	1	...	...	...	...	...	...	65
Norton E. A. Sampson.	1	5	...	...	...	...	13	...	...	5	2	...	3	1	...	1	3	1	...	...	...	...	...	1	1	...	...	1	38
	...	51	...	8	...	...	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	86
	...	41	...	9	...	...	107	...	...	10	2	3	3	1	...	1	2	1	...	...	...	...	...	1	1	...	4	...	190
Repton F. W. Bullock G. V. Peace.	82	84	6	14	10	5	54	6	7	79	41	20	98	33	12	12	47	4	32	16	5	107	4	3	...	2	229	1012	
	38	46	2	13	...	3	27	4	6	15	18	6	14	22	1	5	10	...	19	2	3	15	...	...	...	1	26	296	
	71	84	6	14	10	5	55	6	7	8	49	19	75	28	9	10	31	4	30	7	5	107	4	3	...	2	239	963	

# **RURAL DISTRICTS**—*continued.*

Shardlow F. G. Forman.	Informal Notices served by Sanitary Inspector ...	25	72	14	2	9	5	159	10	1	122	37	55	35	61	20	31	37	6	49	3	5	31	...	5	...	1	27	822
	Legal Notices served by Local Authority	...	6	...	...	...	2	1	1	...	8	1	7	12	10	7	10	11	...	5	6	2	1	...	...	...	...	16	113
	Nuisances abated	...	78	66	1	7	16	144	12	2	185	39	42	49	61	22	41	46	6	66	5	9	32	...	4	...	5	45	1008
Sudbury C. E. Ingham.	Informal Notices served by Sanitary Inspector ...	1	...	...	...	...	...	...	1	...	...	4	...	4	...	4	5	...	...	1	...	...	2	...	...	...	...	3	25
	Legal Notices served by Local Authority	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Nuisances abated	...	...	...	...	...	...	...	1	...	...	4	...	4	...	...	5	...	...	1	...	...	...	...	...	...	...	3	25

**LOANS**

FOR PROVISION OF SEWERAGE AND SEWAGE DISPOSAL WORKS  
AND WATER SCHEMES.

During the six years, 1925—1930, inquiries have been held by the Ministry of Health on the applications of the following District Councils for sanction to Loans for the purposes of Sewerage and Sewage Disposal and Schemes of Water Supply, as follows :—

<i>District.</i>	<i>Date of Inquiry.</i>	<i>Amount of Loan.</i>	<i>Purpose.</i>	<i>Result of Inquiry.</i>
1925.				
Ripley U.D.	Jan. 9.	£5,404.	Sewerage and sewage disposal for Marehay.	Work carried out.
Chesterfield R.D.	Jan. 15.	£5,026.	Sewerage and temporary sewage disposal works at Hollingwood.	Work carried out.
Swadlincote U.D.	Feb. 4.	£6,840.	Water supply.	£3,560 sanctioned, work completed.
Chesterfield Boro'	May 21.	£1,522.	Construction of sewer along Greendale Avenue	Loan sanctioned. Work completed.
Chesterfield R.D.	May 22.	£1,855	Enlargement of Hollingwood No. 1 sewage disposal works.	Work carried out.
Bolsover U.D.	July 7.	£10,000	Water Supply.	£2,250 sanctioned for new mains and chlorinator. Other works abandoned in favour of new Whaley scheme.
Ilkeston Boro'	Sept. 4.	£11,962.	Improvements to Market Place area water supply	Mains carried out. Water Tower abandoned.
Shardlow R.D.	Sept. 22.	£41,250.	Water supply to Ockbrook, Draycott, Elvaston, Shardlow, Aston, Chellaston and Breaston.	Loan sanctioned. Work completed.
Chesterfield R.D.	Sept. 23.	£15,439	Improvements to water supplies of many Parishes.	Loans sanctioned and works completed.
Chesterfield R.D.	Oct. 13..	£90,913.	Sewerage and sewage disposal of Staveley, Brimington, etc.	Work carried out.
Ashbourne U.D.	Oct. 15. ]	£1,500.	Water supply. Bore-hole at Ednaston.	Work carried out. but abandoned. New bore-hole made at Rodsley.

<i>District.</i>	<i>Date of Inquiry.</i>	<i>Amount of Loan.</i>	<i>Purpose.</i>	<i>Result of Inquiry.</i>
Belper R.D.	Nov. 3.	£1,220.	Re-modelling of Holbrook Sewage Works.	Work carried out.
Blackwell R.D.	Nov. 4.	£7,897.	Sewerage of Langwith area.	Work carried out.
Ripley and Heanor U.D's.	Dec. 15.	£5,217.	Waingroves sewage.	Work carried out.
1926. Belper U.D.	Mar. 4.	£11,500.	Water Supply.	Loan sanctioned. Work carried out
Clowne R.D.	Mar. 24.	£4,750.	Barlborough Water Supply.	Work completed.
Shardlow R.D.	July 8.	£9,070.	Sewerage and sewage disposal for Chaddesden.	Work carried out.
Bolsover U.D.	July 23.	£3,450.	Waterworks for Whaley.	Work completed.
Belper R.D.	Aug. 18.	£22,920.	Sewerage and sewage disposal for Crich, Fritchley, Crich Carr and Whatstandwell.	Work carried out.
Chesterfield R.D.	Sept. 14.	£13,500.	Water Supply.	Loan increased to £17,000 Work completed.
Shardlow R.D.	Oct. 27.	£11,200.	Water supply for Melbourne.	Work carried out.
Clay Cross U.D.	Oct. 28.	£17,750.	Water Supply.	£2,250 sanctioned for borehole.
Shardlow R.D.	Dec. 17.	£10,666.	Water supply for Sandiacre.	Loan sanctioned. Work completed.
1927. Glossop Dale R.D.	March 10.	£28,000.	Sewerage and sewage disposal for Charlesworth and Chisworth.	Scheme not approved by Ministry of Health.
Glossop Dale R.D.	March 10.	£9,250.	Water supply for Charlesworth.	Work carried out.
Blackwell R.D.	April 20.	£7,750.	Sewerage and sewage disposal of Scarecliffe and Hillstown.	Work carried out.
Chapel R.D.	May 19.	£1,750.	Sewerage and sewage disposal of Dove Holes.	Work carried out.
Chesterfield R.D.	May 26.	£3,495.	Sewerage and sewage disposal of Williamthorpe.	Work carried out.
Chesterfield R.D.	May 27.	£3,833.	Sewerage at Morton.	Work carried out.
Glossop Dale R.D.	June 23.	£5,400.	Marple Bridge Sewerage.	£2,700 sanctioned, Work completed.



<i>District.</i>	<i>Date of Inquiry.</i>	<i>Amount of Loan.</i>	<i>Purpose.</i>	<i>Result of Inquiry.</i>
Ashbourne U.D.	Aug. 3.	£19,330.	Water supply from Rodsley.	Work carried out.
Bonsall U.D.	Sept. 23.	£575.	Water supply to Slaley.	Scheme not sanctioned.
Chesterfield Boro'	Nov. 7.	£6,600.	Barbrook water scheme.	Loan sanctioned. Work completed.
Baslow U.D.	Nov. 9.	£3,000.	Water supply.	Waterworks purchased.
1928.				
Shardlow R.D.	April 27.	£1,800.	Spondon sewage works.	Enlargement carried out.
Chapel R.D.	May 8.	£14,500.	Water supply of Chapel, Chinley, Bugsworth and Brownside.	Work completed.
Belper R.D.	May 10.	£9,700.	Smalley sewage works.	Works carried out.
Chapel R.D.	June 28.	£3,750.	Hartington sewage disposal.	Not yet Sanctioned.
Chapel R.D.	June 28.	£522.	Sewerage at Hope.	Scheme not sanctioned.
Bolsover U.D.	Sept. 25.	£7,990.	Water supply works.	£2,685 sanctioned—excess expenditure on Whaley scheme.
Repton R.D.	Sept. 26.	£20,600.	Mickleover sewage.	Work in hand.
Belper R.D.	Nov. 7.	£13,400.	Allestree, Quarn-don, and Mark-eaton sewage.	Work carried out.
1929.				
Chesterfield R.D.	Feb. 1.	£6,058.	Sewage disposal for Shirland, Higham, New Higham and Hallfield Gate.	Work carried out.
Heage U.	Feb. 12.	£19,000.	Sewage disposal for Heage, Upper Heage, Nether Heage, Amber-gate and Saw Mills.	Work in progress.
Blackwell R.D.	April 16.	£155,577.	Water supply for all the Rural District.	Work in progress.
Shardlow R.	June 18.	£15,280.	Sewage disposal for Chellaston.	Work carried out.
Bolsover U.D.	June 21.	£5,000.	Conversion of privies to water closets.	Work in progress.
Chesterfield R.D.	July 9.	£1,874.	Sewage disposal works at Hackenthorpe.	Work carried out.

<i>District.</i>	<i>Date of Inquiry.</i>	<i>Amount of Loan.</i>	<i>Purpose.</i>	<i>Result of Inquiry.</i>
Chapel R.	Aug. 13.	£6,196.	Water scheme for additional supply to Harpur Hill.	Work in progress.
Shardlow R.	Sept. 10.	£15,235.	Sewage disposal for West Hallam.	Work in progress.
Hartshorne and Seals R.D.	Sept. 24.	£2,319.	Water supply for Woodville and Overseale.	Work in progress.
Bakewell R.D.	Nov. 5.	£3,700.	Water supply for Eyam. (Excess expenditure.)	Sanctioned.
Bakewell R.D.	Nov. 6.	£14,000.	Water supply for Hathersage and Outseats.	Sanctioned.
Chapel R.	Nov. 7.	£3,150.	Water supply for Wormhill and Peak Dale.	Scheme approved. Tenders being obtained.

The following are details of the Ministry of Health Inquiries held during the year 1930 :—

**Alvaston and Boulton Urban.** SEWERAGE. The U.D.C. applied to the Ministry of Health for sanction to a loan of £15,779 for the purpose of laying sewers in their district, and an Inquiry was held on 14th February, 1930.

Two schemes were proposed, one the sewerage of Alvaston Street, the other the provision of sewers in Boulton Lane and Chellaston—Derby Road—which will enable building development to take place over an area of about 200 acres. Both these sewers will connect up with the Derby Corporation sewer, as the district is included in the drainage area set out by the Derby Corporation Act, 1901, and the District Council can ask the Derby Corporation to take the sewage into the Corporation sewers up to 12 times the dry weather flow. The Scheme has been sanctioned and the work is in progress.

**Ashbourne Urban.** REFUSE DESTRUCTOR. The Ministry of Health held an Inquiry on 11th March, 1930, on the application of the U.D.C. for sanction to a loan of £1,275 for the purpose of constructing a refuse destructor in Watery Lane, Ashbourne. The present refuse dump is almost full.

The Inspector holding the Inquiry asked that the Council should consider the question of dumping the refuse on a suitable site, according to the " controlled " system. The system is that every day's tipping of refuse should be covered over with about 6in. to 9in. of soil, or other suitable material, leaving no refuse exposed to the air to cause a smell or attract flies and rats; all tins to be so arranged as to be filled with refuse, thus avoiding cavities in which rats could breed; and the tipping to be done in layers of not more than 6 feet deep. The scheme has been sanctioned and the work is in hand.

**Belper Urban. SEWAGE.** The Urban District Council applied to the Ministry of Health for sanction to a loan of £22,050 for purposes of laying certain sewers in Shaw Lane and Belper Lane End areas, and extending and improving the existing sewage works. The Inquiry was held on June 26th, 1930.

The scheme includes converting the existing two settling tanks into four tanks, providing two additional detritus tanks, three additional filters, two humus tanks, twelve sludge beds and two storm water tanks. The drainage from the sludge beds will be pumped back for treatment.

The scheme was sanctioned and the work is in progress.

**Bolsover Urban District. WELBECK ROAD SEWER.** The Ministry of Health held an Inquiry on 13th February, 1930, on the application of the Urban District Council for sanction to a loan of £2,042 for the purpose of laying a new sewer in Welbeck Road, Bolsover, to commence at the Primitive Methodist Church and terminate at a point beyond the junction of Elmton Lane and Welbeck Road. The proposed sewer is to be laid with 9in. glazed stoneware socketted pipes at an even gradient of 1 in 250. This sewer could be further extended north-east along Welbeck Road. The land on either side of this road at this point is a desirable building site, and 87 houses could be erected, each with an assumed frontage of 30 feet. If the new sewer is laid, it will receive sewage from 240 houses, including 87 estimated to be built during the next ten years.

The scheme was not sanctioned by the Ministry of Health, and a revised scheme is to be undertaken out of rates.

**Chesterfield Borough. SEWAGE.** The Ministry of Health held an Inquiry on the 23rd October, 1930, on the application of the Borough Council for sanction to a loan of £39,000 for works of sewage disposal.

Up to 1926, the sewage was disposed of at four separate outfalls. In that year the new sewage works at Whittington were constructed to deal with the whole of the sewage at one outfall. These works were designed on the " Bio-Aeration " (Activated Sludge) principle by Mr. Haworth, of Sheffield, and were to have consisted of four aeration units, but, owing to the sewage being assumed to be " domestic " sewage, with little trade waste, it was decided to construct three aeration units only, and add another unit when necessary.

It has been found that the efficiency of units is impaired (especially in dry weather) by the large quantity of trade waste entering the sewers. This trade waste has now been estimated to be 550,000 gallons in a total dry weather flow of 1,700,000 gallons per day.

The present three units can effectively deal with 1,125,000 gallons per day constantly, and sometimes more than this quantity, but at times the excess effluent from the preliminary settling tanks



effluent has had to be chlorinated and passed direct to the river. This tank effluent amounts at times to about 500,000 gallons per day. The existing works cost £74,000, not including main extension sewers. More sludge beds were added at a later date.

The scheme now proposed comprises another bio-aeration unit somewhat larger than any of the existing units, also three sludge digestion tanks to reduce the quantity of sludge to be dealt with in the beds, and to convert the sludge from being acid fermentive to alkaline fermentive. In this latter state the Engineer stated that the sludge would not give off offensive smells. A large number of extra sludge drying beds will be provided, partly to increase the bed area and partly to reinstate several sludge beds which now stand on the site of the proposed aeration unit. Sludge will be pumped to the digestion tanks, whence the converted sludge will gravitate to sludge drying beds. The supernatant water will be taken back to the detritus tanks for re-treatment.

The length of channels in the new aeration unit will be about one mile, and the sewage will take an hour to complete the journey, the agitation and movement being by paddle wheels, as at present.

The capacity of the sludge digestion tanks will be approximately  $1\frac{1}{2}$  million gallons, the total area of all sludge drying beds being equal to one square yard to every four persons included in the drainage area.

It was explained that the bio-aeration process is simply that which occurs in the natural purification of a river, but carried out artificially with sewage, in long channels, the agitation being effected by means of paddle wheels. In short, it is "intensified purification of a river produced artificially."

It has been found that the existing three detritus tanks of one hour's flow, the eight preliminary settling tanks of four hours' flow, and the fifteen final settling tanks (humus) of six hours' flow, will be sufficient for the proposed extra aeration unit.

The Ministry of Health have sanctioned the loan and tenders are being invited for the work.

**Heanor Urban.** SEWAGE. The Ministry of Health held an Inquiry on the 12th August, 1930, into the application by the Urban District Council for sanction to a loan of £66,000 for the purposes of sewerage and sewage disposal at Heanor.

The scheme deals with the sewage at present treated separately at Loseoe, Woodend, Langley Mill, and Commonsides.

With the exception of Commonsides, the existing works are worn out and constantly need attention.

All the sewage from the above places will be taken to Langley Mill and adequate works provided there.



The present dry weather flow is 353,357 gallons per day, and the works have been designed to deal with 424,339 gallons per day. the trade waste amounts to 130,411 gallons per day.

Separation of the storm water takes place at the works at three times the dry weather flow. The existing two shallow lagoons will be used as storm water tanks.

The new works will consist of four detritus tanks, having a capacity of 11,587. gallons, five settling tanks 346,720 gallons capacity; ten filters 6 feet deep, 12,328 cubic yards (45 gallons per cubic yard); two humus tanks, 92,800 gallons, and thirty-four sludge beds, from which the drainage will be returned for re-treatment. A Pump House will be provided for lifting these waste.

The scheme was sanctioned by the Ministry and the work is in progress.

**Ilkeston Borough.** An Inquiry was held by the Ministry of Health on the 18th September, 1930, into the application by the Borough Council for sanction to borrow £57,000 for purposes of constructing new and additional outfall sewers and a new storm overflow to the River Erewash, and also for the enlargement of the sewage disposal works by approximately 50%. The estimated cost of this work is £47,000.

The remaining £10,000 is for the purpose of washing the media in the existing bacteria beds and providing new media to replace wastage, and the renewals of existing machinery.

The scheme has been sanctioned by the Ministry of Health.

**Ilkeston and Heanor Water Board.** The Ministry of Health held an enquiry at Heanor on the 5th December, 1930, on the application of the Water Board for sanction to a loan of £76,986 for the purpose of water supply.

The Board supplies water to Ilkeston and Heanor, also certain parts of Ripley.

The proposals of the Board are to instal a set of Diesel Engine Pumps in a new engine house, provide further water softening plant, construct an additional rising main to Chadwick Nick Reservoir, and an extra gravitation main to the Codnor Reservoir.

It is understood that Ilkeston Borough Council and Heanor Urban District Council propose to increase the storage capacity of their respective service reservoirs to provide for a three days' supply.

If no grant is obtained from the Unemployment Grants Committee, the Board did not propose to carry out the scheme at present.

Strong opposition was raised against the scheme on account of the cost, as both Ilkeston and Heanor have recently applied for large loans for sewage disposal purposes.

The Board's representatives stated that the present engines will require replacing in about four years' time.

The intention is to use the old steam engine pumps while they are satisfactory and use the new plant as a stand-by.

It was suggested by the opposition that electrical pumps be provided instead of Diesel engined pumps, and that, instead of a new gravitation main from Chadwick Nick to Codnor, "by-passes" be laid at the points on the main where leakages occur owing to subsidence.

The opposition also maintained that as the existing rising main had given little trouble it should not be necessary to lay a duplicate rising main.

The Ministry of Health has approved of the scheme generally, and the work is in hand.

**Matlocks Urban.** SEWERAGE. An Inquiry was held by the Ministry of Health on April 2nd, 1930, into the application of this Urban District Council for sanction to borrow £41,500 for purposes of extending the sewers of the district and connecting up certain drainage with existing sewers.

The proposed scheme includes the sewerage of Matlock Moor, Lumsdale, Tansley, Matlock Cliff, Astor Lane, and Derby Road, Cromford, and the connecting up of properties in the Main Road, Matlock, and the Parade, Matlock Bath. The last two-mentioned properties include about 168 houses which at present drain into the River Derwent. The small sewage works at Tansley would be abandoned. The sewerage of Riber was left out of the scheme owing to the cost. The loan has been sanctioned and the work is in progress.

**Bakewell Rural.** GREAT LONGSTONE SEWAGE. An Inquiry was held on June 27th, 1930, by the Ministry of Health into the application of this Rural District Council for sanction to a loan of £5,000 for purposes of sewerage and sewage disposal for Great Longstone. At present, most of the sewers are rubble, and the only treatment of the sewage is the removal of the detritus in a catchpit. It is proposed to lay new sewers in place of the rubble sewers and construct a detritus tank, two settling tanks, a filter, and humus tank, together with a set of sludge beds. The scheme has been sanctioned by the Ministry of Health and the work is being proceeded with.

**Chapel-en-le-Frith Rural.** CHINLEY, BUGSWORTH, AND BROWNSIDE WATER. The Ministry of Health held an Inquiry on January 7th, 1930, on the application of this District Council to borrow £7,800 for the purpose of collecting the water from the Rainside Spring on Combs Moss, and piping it to a reservoir now in course of construction. The minimum flow of this spring was on July 9th, 1929,\* when the yield was 43,200 gallons per day. The scheme has been sanctioned by the Ministry of Health.

**EDALE WATER.** The Ministry of Health held an Inquiry on July 29th, 1930, on the application of this District Council for sanction to a loan of £1,120 for the purpose of water supply to Edale. The present supply is received from the London, Midland and Scottish Railway Company, and the Council propose to purchase the waterworks and extend the present pipe up to a spring and provide fire hydrants. The spring would be tapped before the water issues from the surface. The yield of the spring in 1927 was 28,000 gallons per hour. A storage tank would be constructed later, if needed. The sanction of the Ministry of Health has been obtained to the scheme.

**Hartshorne and Seals Rural. OVERSEAL SEWAGE.** This District Council applied to the Ministry of Health for sanction to borrow £11,550 for works of sewerage and sewage disposal at Overseal. The Inquiry was held on May 29th, 1930. The scheme provides for re-sewering most of the village and picking up the drainage from the new houses on the Burton Road. The site for the new sewage works is to the south of Lullington Road. There will be a pumping station at Gorsey Leys. The existing sewage works for the Shortheath area will be re-modelled and a filter provided. The new main sewage works will consist of two detritus tanks, two settling tanks, a storm water tank, two circular filters, and two humus tanks. The scheme has been sanctioned and the work is in progress.

**Repton Rural. REPTON SEWAGE WORKS.** The Ministry of Health held an Inquiry on December 2nd, 1930, on the application of this District Council for sanction to a loan of £5,050 for extending the sewage disposal works at Repton and improving the pumping arrangements. The scheme provides for an additional storm water tank, an additional circular filter, and two humus tanks at the sewage works, and for the installation of automatic electric pumps in duplicate at the pumping station, together with two detritus tanks, and for constructing an additional rising main from the pumps to the sewage works. It is also proposed to lay a length of 6" sewer to the group of houses known as Mount Pleasant, as various nuisances in connection with the houses cannot be remedied until a sewer is provided. The installation of improved pumping machinery will prevent the storm overflow at the pumping station coming into action too early. The pumps will be capable of delivering six times the dry weather flow to the works. The sludge bed accommodation is now being enlarged and improved at the suggestion of my Department. The scheme has been sanctioned by the Ministry of Health.

**Shardlow Rural. STANLEY SEWERAGE.** The Rural District Council have applied for a loan of £3,300 for the purpose of sewerage part of Stanley Parish known as "Klondike," and Sough Lane area, and the Inquiry was held on March 20th, 1930. At Sough Lane a pumping station will be required to lift the sewage to the sewage works. The loan has been sanctioned and the work is nearly completed.



**SHARDLOW SEWAGE.** The Ministry of Health held an Inquiry on April 4th, 1930, on the application of this District Council for sanction to a loan of £20,235 for the purpose of sewerage and sewage disposal works for the parish of Shardlow. At present the sewage is connected to an old land drain which discharges into an open ditch about  $1\frac{1}{2}$  miles before reaching the river. Owing to the water-logged nature of the ground, it was proposed to lay spun-iron pipes and provide two pumping stations—No. 1 near the rectory, fitted with two 3" automatic electric pumps; and No. 2, situated on the Wilne Road, fitted with two 4" automatic electric pumps. There is a small group of about 15 houses which would not be included in the scheme, but, as stated by the Engineer, levels permit of these houses being taken into the present scheme at an additional cost of about £1,000. The disposal works consist of detritus and settling tanks and percolating filters and humus tanks.

This scheme, however, was not approved, as it was suggested that the villages of Weston and Aston should be included in the scheme. A further Inquiry, therefore, was held on October 24th, 1930, for sanction to a loan of £36,042 for the purpose of providing a joint sewage scheme for Shardlow, Weston, and Aston with sewage works at Shardlow and a pumping station at both Weston and Aston. The Corporation of Nottingham desired to join in the scheme so that the sewage from Aston Hall could be dealt with. The Corporation would be responsible for a portion of the loan, amounting to £3,555. The cost of the scheme would be apportioned between the parishes, as follows:—

Shardlow	...	...	...	£19,862
Weston	...	...	...	£5,325
Aston	...	...	...	£10,855

The scheme would provide for a population of 7,285.

Considerable opposition was made by Weston inhabitants against the inclusion of that parish, partly on account of cost and partly on account of the scheme dealing only with that portion of the parish lying north of the railway. No opposition was offered by Shardlow and Aston.

The scheme was sanctioned except so far as regards Weston.

**BREADSALL SEWAGE.** The Rural District Council proposes to provide a sewerage system and sewage disposal works for the village of Breadsall, and an Inquiry was held by the Ministry of Health on April 29th, 1930, for sanction to borrow £11,750 for this purpose. In the area to be dealt with there are three watersheds—one portion will drain to Derby Corporation sewers, another to Little Eaton sewage works, and the third to new sewage works to be provided on a site opposite Breadsall Canal Bridge, next to the railway, on the west side of the main road. As an alternative, the whole of the sewage could be pumped to Little Eaton sewage works, but the works would have to be doubled. The sanction of the Ministry of Health has been obtained and the work is in progress.



**RISLEY SEWERAGE.** An Inquiry was held by the Ministry of Health into the application of the Rural District Council for sanction to a loan of £2,250 for the purpose of extending the sewers in Rushby Lane and Main Road. The sewers will be connected to the Sandiacre sewerage system. The scheme will do away with several cesspools in an area where building development is taking place. The sanction of the Ministry of Health to the scheme was obtained and the work has been completed.

### SCHOOLS.

**Infectious Diseases in Schools.**—Inter-notification between the teachers, the local medical officers of health and the Central Office has made it possible to keep a close watch on the occurrence of infectious diseases in the schools. The Assistant Medical Officers investigate, in co-operation with the Local Medical Officers of Health, and give advice to the teachers and, where necessary, exclude children to prevent the spread of infection. The following table shows the number of children examined for this purpose during the year:—

Diphtheria	...	...	3,061
Smallpox	...	...	2
Scarlet Fever	...	...	771
Other Diseases	...	...	59
			3,893

The rules adopted in this County as to the exclusion from the closure of schools on account of infectious or contagious disease are based upon the revised Memorandum on the Ministry of Health and the Board of Education. Particulars with regard to these rules and the regulation with regard to medical inspection of school children are issued in the form of a booklet to all teachers and others concerned

The following Table gives information as to the procedure usually adopted in case of the infectious diseases mentioned therein:—

Disease.	Exclusion of Infected Child.	Exclusion of Children living in infected houses.
Scarlet Fever.	(1) If treated in hospital until two weeks after date of discharge from hospital or longer, if the Medical Officer of Health so certifies. (2) If treated at home until two weeks after the date of disinfection of house, or longer if the Medical Officer of Health requires.	(1) Until one complete week after the house has been disinfected subsequent to removal of patient. (2) Until one week after disinfection of house.

Disease.	Exclusion of Infected Child.	Exclusion of Children living in infected houses.
Diphtheria.	(1) If treated in hospital until two or three weeks or longer after date of discharge from hospital at the discretion of the Medical Officer of Health. (2) If treated at home, until two or three weeks or longer after disinfection of house, at the discretion of the Medical Officer of Health.	(1) Until two weeks after disinfection of house or such other period as the Medical Officer of Health determines. A negative swab should be obtained. (2) Until ten days after disinfection of house, or such other period as the Medical Officer of Health determines. A negative swab should be obtained.
Small-pox.	(1) Until after discharge from hospital. (2) If treated at home, until certified free to attend school.	(1) Until 16 days after disinfection of the house subsequent to removal of patient, or until certified free to attend school. (2) Until certified free to attend school.
Enteric (Typhoid) Fever.	(1) Until after discharge from hospital. (2) If treated at home, until certified free to attend school.	Children coming from houses in which cases of enteric fever have occurred need not, as a rule, be excluded.
Erysipelas.	As for Enteric.	As for Enteric.
Measles and German Measles.	Three weeks from date of appearance of rash or such longer period as the medical attendant certifies. If the complaint is definitely known to have been "German Measles" exclusion for one week from the date of appearance of rash is usually sufficient.	Infants—All infants to be excluded for three weeks from date of onset of last case in house. Seniors—Children who have not already had the disease must be excluded as in case of infants. Children who have had the disease need not be excluded unless Medical Officer of Health or Medical Attendant requires.
Dysentery.	Until certified free to attend school.	Until certified free to attend school.
Whooping Cough.	Six weeks, or as long as the cough with whoop continues.	Infants—Children in infant schools to be excluded for six weeks from date of onset of last case, or as long as the cough continues; or three weeks from date of last exposure to infection. Seniors—Children who have not had the disease to be excluded as in case of infants. Children who have had the disease need not be excluded.
Chicken-pox.	Three weeks or until all scabs have disappeared.	Infants—Children in infant schools to be excluded for three weeks from date of last exposure to infection. Seniors—Children who have not already had the disease to be excluded as in the case of infants. Children who have had the disease need not be excluded.

Disease.	Exclusion of Infected Child.	Exclusion of Children living in infected houses.
Mumps.	One week after the subsidence of the swelling.	Owing to the long incubation period exclusion from school involves considerable interference with school work. In view of this fact and of the absence of danger to life, the exclusion may be confined to the patient.
Cerebro-spinal Fever.	Three months or longer.	Three weeks.
Acute Poliomyelitis.	Six weeks or longer.	Three weeks or longer.
Encephalitis Lethargica.	Mild or abortive attack—Six weeks or longer. Fully developed attack — Six months or longer.	Until three weeks after isolation of patient.

Children suffering from any of the following contagious diseases are excluded from school, and the fact notified at once to the County School Medical Officer.

“Contacts” of the children affected need not be excluded.

Disease.	Description.	Period of Exclusion of Infected Child.
Ringworm.	(a) Head—Usually causes bald or scaly patches with raised edges, and short broken hairs at edge.  (b) Body—Red rings with raised edges, enclosing an area of scaly skin.	14 days after X-ray treatment children are excluded till the hair ceases to fall out and the head is free from infection, as a rule 3 to 6 weeks. Other cases of ringworm are not excluded but children must wear caps of washable material as distinct from ordinary headgear. This cap must not be taken off whilst in school.
Scabies or Itch.	A very irritable eruption usually commencing in clefts of fingers or on wrists as small pimples going on to pustules or scabs.	Till all pimples and itching have disappeared.
Impetigo.	Blebs, which soon turn into sores, on which raised crusts form, usually round the mouth, but any part of the body may be affected.	Till all sores are healed.
Purulent Ophthalmia.	Copious discharge of “matter” from eyes with swelling of the eyelids. The disease is most catching, and a patient must not be allowed to use towels used by other children.	Till all discharge from eyes has ceased.

The number of schools closed during the year on account of infectious diseases is given in the following Table. It will be seen that there is a slight increase in the number of schools closed as compared with the previous year. Two schools were closed by the School Medical Officer, and 20 by the Local Sanitary Authority, compared with a total of 14 schools closed during 1929. It must not be lost sight of that in exceptional cases only is it necessary to close a school in the interests of public health.

TABLE XXXIII.

Year	No. of Schools or Departments closed.	No. Closed by School Med. Officer.	No. Closed by Sanitary Authority.	REASON FOR CLOSURE.						Mumps.	Other Causes.
				Influenza.	Measles.	Whooping Cough.	Chicken Pox.	Scarlet Fever.	Diphtheria.		
1918	463	153	310	394	25	20	9	5	5	3	2
1919	70	28	42	28	32	1	1	2	4	1	1
1920	60	24	36	1	44	1	—	3	10	—	1
1921	59	19	40	39	2	7	—	4	6	1	—
1922	44	27	17	11	22	5	1	2	—	—	3
1923	42	23	19	2	21	6	1	5	—	2	5
1924	32	14	18	3	17	2	1	2	1	1	5
1925	52	10	42	11	33	6	—	—	1	1	—
1926	14	1	13	—	8	3	—	2	1	—	—
1927	128	16	112	100	14	2	1	1	1	2	7
1928	19	3	16	—	15	1	—	2	1	—	—
1929	14	2	12	7	1	1	—	3	1	—	1
1930	22	2	20	2	11	1	1	5	—	—	2

## SCHOOL SANITATION.

During the year, special enquiry was made into the sanitation of all schools in the County area, and, through the courtesy of School Correspondents and Head Teachers, I was able to obtain,



for inclusion in this report, particulars with regard to the sanitation of 373 out of the 377 elementary schools. The following summary shows at a glance the position as revealed by the inquiry :—

TABLE XXXIV

	<i>Details</i>	<i>No of Schools.</i>
1. WATER SUPPLY.	{ Public ... .. 282	
	{ Pump from well ... .. 54	
	{ Other sources ... .. 47	
2. CLOSET ACCOMMODA- TION.	{ W.Cs. with separate flushing cisterns 166	
	{ W.Cs. with automatic flushing cisterns 48	
	{ Pail Closets ... .. 145	
	{ Privy-middens ... .. 25	
3. DRAINS connected to public sewer...	... .. 263	
4. DISPOSAL OF ASHES AND REFUSE.	{ Number with Bins ... .. 221	
	{ Number with Ash-pits ... .. 128	
	{ Number emptied daily ... .. 6	
	{ Number emptied weekly or fortnightly 183	
	{ Number emptied 3-weekly or monthly 10	
	{ Number emptied every two months ... 2	
	{ Number emptied quarterly ... .. 11	
	{ Number emptied every 4 or 6 months... 11	
	{ Number emptied annually ... .. 6	
	{ Number emptied as required ... .. 111	
	{ Number where refuse burned ... .. 1	
5. HEATING.	{ By low pressure hot water ... .. 259	
	{ By high pressure hot water ... .. 39	
	{ By open fires ... .. 141	
	{ By slow combustion stoves ... .. 49	
6. LAVATORY ACCOMMODA- TION.	{ Lavatory troughs ... .. 176	
	{ Separate wash-basins ... .. 173	
	{ Portable basins... .. 45	
7. PLAYGROUNDS.	{ No. with tarmacadam ... .. 251	
	{ No. with gravel ... .. 86	
	{ No. otherwise ... .. 99	
8. CLOAKROOM ACCOMMODATION	{ No. where accommodation is sufficient ... .. 317	
9. VENTILATION.	{ No. with hopper windows ... .. 245	
	{ No. with satisfactory ventilation ... 212	

### HOUSING.

519 houses were inspected by the County Health Department Officials in the Parish of Shirebrook during the year 1930.

Tables XXXV. and XXXV (a) show the work done in the various districts of the County during the year.

## INSPECTION AND SUPERVISION OF FOOD.

### MILK SUPPLY.

Eight licences for the production of Grade "A" milk were issued during 1930 under the Milk and Dairies Amendment Act, 1922.

One Grade "A" licensee is now producing Grade "A" (certified T.T.).

MILK & DAIRIES (CONSOLIDATION) ACT, 1915 AND TUBERCULOSIS ORDER, 1925.—The procedure set out in the Survey Report for 1925 has again been followed during the year. The work done during the year under the Act and Order is set out below :—

Animals slaughtered under the Tuberculosis Order	...	...	...	376
No. with advanced tuberculosis	...			309
No. with tuberculosis, but not advanced				62
No. not tuberculous	...	...	...	5
Milk samples examined	...	...	...	823
„ found positive on direct examination	...	...		40
„ found positive on inoculation				91
„ found negative on inoculation				692

### COWSHEDS.

An inspection of a large number of cowsheds has been carried out during 1930 by the two County Sanitary Inspectors, along with the Local Sanitary Inspectors concerned.

The districts where cowsheds have been inspected are :—

Bakewell Urban—the whole.

Matlocks Urban—the whole.

North Darley Urban—the whole.

Wirksworth Urban—practically all.

Ashbourne Rural—Hollington, Longford and Brailsford parishes only.

Bakewell Rural—approximately half the total number.

Belper Rural—portion only.

The total number of sheds inspected is 727, concerning 387 farms.

## URBAN DISTRICTS.

## TABLE XXXV.

	ALFRETON.	ALVASTON & BOULTON.	ASHBOURNE.	BAREWELL.	BASLOW.	BELPER.	BOLSOVER.	BONSALL.	BRAMPTON & WALTON.	BUXTON (BORO').	CHESTERFIELD (BORO').	CLAY CROSS.	DRONFIELD.	GLOSSOP (BORO').	HEAGE.	HEANOR.	ILKESTON (BORO').	LONG EATON.	MATLOCKS.	NEW MILLS.	NORTH DARLEY.	RIPLEY.	SOUTH DARLEY.	SWADLINCOTE.	WIRESWORTH.
Population (estimated 1929) ... ..	21,630	2,313	4,504	3,159	845	13,050	12,750	1,195	2,255	17,030	65,270	8,727	4,503	19,720	4,403	23,050	33,260	22,240	9,714	8,967	4,196	13,940	674	21,090	3,915
No. of Houses in District ... ..	5,095	756	1,195	728	245	3,095	2,750	325	597	3,512	14,850	1,908	1,169	5,668	937	5,253	7,287	5,805	2,641	2,268	1,158	3,267	221	4,535	1,044
Average No. of Persons per House ... ..	4.24	3.06	3.76	4.34	3.45	4.21	4.63	3.67	3.77	4.84	4.39	4.57	3.85	3.47	4.70	4.38	4.56	3.83	3.67	3.95	3.62	4.26	3.05	4.65	3.75
NUMBER OF NEW HOUSES ERECTED DURING THE YEAR:—																									
(a) Total (including No. given separately under (b)) :—	84	65	31	4	3	34	1	—	8	21	65	4	16	35	13	19	55	125	15	5	24	37	—	21	4
(1) By Local Authority. ... ..	46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	63	—	—	—	16	—	—	—
(2) By other Local Authorities ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) By other bodies and persons ... ..	38	65	14	—	3	34	1	—	8	21	65	4	—	—	—	19	31	62	15	5	24	21	—	—	—
(b) With State Assistance under Housing Acts ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(1) By Local Authority ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(a) for purpose of Part II of Act of 1925 ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) for purpose of Part III of Act of 1925 ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	63	—	—	—	—	—	—	—
(c) for other purposes ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	—	—	—
(2) By other bodies or persons ... ..	—	—	—	—	—	—	—	—	—	—	—	—	16	—	13	—	—	—	—	—	—	—	—	21	—
1. INSPECTIONS OF DWELLING HOUSES DURING THE YEAR:—																									
(1) No. inspected for housing defects (under P.H. or Housing Acts) ... ..	250	117	197	43	27	180	119	20	49	964	377	227	320	3230	95	179	1836	379	—	130	175	206	—	120	284
(2) No. (included in sub-head 1 above) inspected and recorded under Housing Consolidated Regulations 1925 ... ..	21	117	44	43	—	180	24	—	—	56	349	42	8	220	95	120	87	181	—	—	42	121	—	—	23
(3) No. found to be dangerous or unfit for habitation ... ..	5	—	10	3	—	—	2	—	—	2	105	—	1	—	—	120	5	1	—	53	1	—	—	1	—
(4) No. (exclusive of those referred to in preceding sub-head) found not to be in all respects reasonably fit for human habitation ... ..	100	4	40	30	6	53	22	20	—	5	278	227	6	220	—	50	1744	139	—	20	33	136	—	119	52
2. REMEDY OF DEFECTS WITHOUT FORMAL NOTICE:—																									
No. rendered fit in consequence of informal action by Local Authority ... ..	90	—	54	24	6	41	22	—	41	—	101	210	99	540	—	50	1831	85	—	—	25	104	—	76	47
3. ACTION UNDER STATUTORY POWERS DURING THE YEAR:—																									
A.—Proceedings under Sec. 3 of Housing Act, 1925,																									
(1) No. in respect of which notices were served requiring repairs ... ..	13	21	20	6	—	—	2	—	—	—	62	—	7	45	—	—	8	47	—	—	1	—	—	—	—
(2) No. rendered fit after formal notice :—	12	11	20	6	—	—	—	—	—	—	56	—	7	45	—	—	8	29	—	—	—	—	—	36	—
(a) By owners. ... ..	—	—	—	—	—	—	—	—	—	—	10	—	—	—	—	—	—	8	—	—	—	—	—	—	—
(b) By Local Authority in default of owners ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) No. in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ... ..	—	—	4	—	—	—	2	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
B.—Proceedings under Public Health Acts:—																									
(1) No. in respect of which notices were served requiring defects to be remedied ... ..	25	23	35	6	—	167	50	1	—	501	—	—	9	9	14	8	150	3	—	—	7	—	—	—	12
(2) No. of which defects remedied after formal notice :—	60	23	35	6	—	167	49	1	—	415	—	—	9	9	9	8	150	—	—	—	7	—	—	2	9
(a) By owners ... ..	—	—	—	—	—	—	—	—	—	48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) By Local Authority in default of owners ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C.—Proceedings under Sections 11, 14 & 15 of the Housing Act, 1925:—																									
(1) No. of representations made with a view to the making of Closing Orders ... ..	—	—	10	3	—	—	2	—	—	1	—	—	—	—	1	5	5	—	—	—	1	—	—	—	—
(2) No. of houses in respect of which Closing Orders were made ... ..	—	—	10	—	—	—	2	—	—	1	—	—	—	—	1	5	5	—	—	—	1	—	—	—	—
(3) No. of houses in respect of which Closing Orders were determined, the houses having been rendered fit ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
(4) No. of houses in respect of which Demolition Orders were made ... ..	5	—	—	—	—	—	—	—	—	1	—	—	—	—	—	2	5	—	—	—	—	—	—	—	—
(5) No. of houses demolished in pursuance of Demolition Orders ... ..	—	—	—	—	—	—	—	—	—	1	4	—	—	—	—	2	8	—	—	—	—	—	—	—	—
4. NO. OF HOUSES OWNED BY LOCAL AUTHORITY, DISTINGUISHING THOSE BUILT IN THE LAST TWO YEARS AND HELD UNDER																									
(1) Part III. of the Housing Act, 1925 ... ..	—	48	53	—	—	—	—	—	—	—	—	—	—	—	—	—	130	—	—	132	—	104	—	182	—
(2) Part II. of the Housing Act, 1925 ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) Other powers ... ..	260	—	67	—	—	—	—	—	—	—	1578	—	—	—	—	—	208	—	—	132	—	104	—	—	—

HOUSING ACT, 1930

APPROPRIATE	30.1.30	1.1.31	Housing Act, 1930
1	8	8	Housing Act, 1930
2	6	6	Housing Act, 1930
3	—	—	Housing Act, 1930
4	—	—	Housing Act, 1930
5	—	—	Housing Act, 1930
6	—	—	Housing Act, 1930
7	—	—	Housing Act, 1930
8	—	—	Housing Act, 1930
9	—	—	Housing Act, 1930
10	—	—	Housing Act, 1930
11	—	—	Housing Act, 1930



## RURAL DISTRICTS.

TABLE XXXV—continued.

	ASHBOURNE.	BAKEWELL.	BASFORD.	BELPER.	BLACKWELL.	CHAPEL-EN-LE-FRITH.	CHESTERFIELD.	CLOWN.	GLOSSOP DALE.	HARTHORNE & SEALS.	HAYFIELD.	NORTON.	REPTON.	SHARDLOW.	SUDBURY.
Population (estimated 1929) ... ..	10,500	18,800	1,774	25,320	44,670	16,900	84,710	18,670	3,846	9,005	4,424	5,661	18,270	36,830	2,520
No. of Houses in District ... ..	2,593	5,066	418	5,815	9,697	4,499	18,886	4,221	1,194	2,071	1,330	1,911	4,139	10,250	602
Average No. of Persons per House ... ..	4.04	3.71	4.24	4.35	4.60	3.75	4.48	4.42	3.22	4.35	3.32	2.96	4.41	3.59	4.18
<b>NUMBER OF NEW HOUSES ERECTED DURING THE YEAR:—</b>															
(a) Total (including No. given separately under (b)) :—	6	33	3	87	41	120	58	7	24	22	3	127	63	492	—
(1) By Local Authority ... ..	—	—	—	87	—	13	—	—	—	—	—	—	—	52	—
(2) By other Local Authorities ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) By other bodies and persons ... ..	6	33	3	—	—	107	58	—	24	12	3	87	63	440	—
(b) With State Assistance under Housing Acts ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(1) By Local Authority.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(a) for purpose of Part II of Act of 1925 ... ..	—	—	—	—	16	—	—	—	—	—	—	—	—	—	—
(b) for purpose of Part III of Act of 1925 ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) for other purposes ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(2) By other bodies or persons ... ..	—	—	—	—	25	—	—	2	—	10	—	—	—	52	—
<b>1. INSPECTIONS OF DWELLING HOUSES DURING THE YEAR:—</b>															
(1) No. inspected for housing defects (under P.H. or Housing Acts) ... ..	140	433	62	749	2110	230	726	215	98	—	128	274	643	353	98
(2) No. (included in sub-head 1 above) inspected and recorded under Housing Consolidated Regulations 1925 ... ..	130	107	—	108	795	44	5	—	34	—	16	115	135	353	36
(3) No. found to be dangerous or unfit for human habitation ... ..	1	4	—	9	24	3	9	3	2	—	—	2	103	88	—
(4) No. (exclusive of those referred to in preceding sub-head) found not to be in all respects reasonably fit for human habitation ... ..	26	235	—	68	982	41	359	—	13	—	—	15	282	23	8
<b>2. REMEDY OF DEFECTS WITHOUT FORMAL NOTICE:—</b>															
No. rendered fit in consequence of informal action by Local Authority ... ..	9	197	7	44	1161	18	648	16	13	—	65	47	341	56	—
<b>3. ACTION UNDER STATUTORY POWERS DURING THE YEAR:—</b>															
<b>A.—Proceedings under Sec. 3 of Housing Act, 1925.</b>															
(1) No. in respect of which notices were served requiring repairs ... ..	6	18	—	3	540	44	—	—	1	—	2	22	—	4	—
(2) No. rendered fit after formal notices :—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(a) By owners.	4	20	—	—	112	11	244	—	—	—	2	17	—	2	—
(b) By Local Authority in default of owners ... ..	—	—	—	2	3	—	—	—	—	—	—	—	—	—	—
(3) No. in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ... ..	—	—	—	—	17	—	—	—	1	—	—	2	—	—	—
<b>B.—Proceedings under Public Health Acts—</b>															
(1) No. in respect of which notices were served requiring defects to be remedied ... ..	2	31	—	695	—	140	57	—	22	—	68	26	296	45	—
(2) No. of which defects remedied after formal notice :—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(a) By owners ... ..	1	29	—	704	248	19	616	16	22	—	63	22	278	37	—
(b) By Local Authority in default of owners ... ..	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—
<b>C.—Proceedings under Sections 11, 14 &amp; 15 of the Housing Act, 1925:—</b>															
(1) No. of representations made with a view to the making of Closing Orders ... ..	1	4	—	9	29	3	2	—	—	—	—	—	4	8	—
(2) No. of houses in respect of which Closing Orders were made ... ..	—	2	—	2	29	3	8	—	—	—	—	2	11	8	—
(3) No. of houses in respect of which Closing Orders were determined, the houses having been rendered fit ... ..	—	—	—	—	5	—	—	—	—	—	—	—	—	1	—
(4) No. of houses in respect of which Demolition Orders were made ... ..	—	—	—	—	23	—	1	—	—	—	—	2	—	4	—
(5) No. of dwelling-houses demolished in pursuance of Demolition Orders ... ..	—	—	—	—	12	—	—	—	—	—	—	—	—	8	—
<b>4. NO. OF HOUSES OWNED BY LOCAL AUTHORITY, DISTINGUISHING THOSE BUILT IN THE LAST TWO YEARS AND HELD UNDER</b>															
(1) Part III. of the Housing Act, 1925 ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(2) Part II. of the Housing Act, 1925 ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) Other powers ... ..	52	—	—	—	564	—	—	407	—	—	—	—	—	735	—

Date	Time	Place	Remarks
1881	10:00	New York	Left New York for New Orleans. Arrived New Orleans at 10:00. Stayed at the Hotel. The weather was very hot and the humidity was oppressive. The city was very large and the population was very dense. The streets were very dirty and the air was very polluted. The people were very friendly and the food was very good. The city was very beautiful and the scenery was very nice. The trip was very interesting and the experience was very good.
1882	10:00	New Orleans	Left New Orleans for New York. Arrived New York at 10:00. Stayed at the Hotel. The weather was very hot and the humidity was oppressive. The city was very large and the population was very dense. The streets were very dirty and the air was very polluted. The people were very friendly and the food was very good. The city was very beautiful and the scenery was very nice. The trip was very interesting and the experience was very good.
1883	10:00	New York	Left New York for New Orleans. Arrived New Orleans at 10:00. Stayed at the Hotel. The weather was very hot and the humidity was oppressive. The city was very large and the population was very dense. The streets were very dirty and the air was very polluted. The people were very friendly and the food was very good. The city was very beautiful and the scenery was very nice. The trip was very interesting and the experience was very good.
1884	10:00	New Orleans	Left New Orleans for New York. Arrived New York at 10:00. Stayed at the Hotel. The weather was very hot and the humidity was oppressive. The city was very large and the population was very dense. The streets were very dirty and the air was very polluted. The people were very friendly and the food was very good. The city was very beautiful and the scenery was very nice. The trip was very interesting and the experience was very good.
1885	10:00	New York	Left New York for New Orleans. Arrived New Orleans at 10:00. Stayed at the Hotel. The weather was very hot and the humidity was oppressive. The city was very large and the population was very dense. The streets were very dirty and the air was very polluted. The people were very friendly and the food was very good. The city was very beautiful and the scenery was very nice. The trip was very interesting and the experience was very good.

The method adopted has been to visit the farms with the Local Sanitary Inspector and obtain full details of the existing conditions, enter them on a printed card, using one card for each shed, and to offer any suggestions to the cowkeeper and the Sanitary Inspector as to what is required to put the sheds, dairy, etc., into a satisfactory state. The Local Sanitary Inspector is then supplied with the inspection cards, duly filled in, including any suggestions which may help him in serving the necessary notices.

A statement of the County Standards for Dairies and Cowsheds and the care to be taken in milking has been given to each of the Inspectors concerned for their guidance, together with blue prints shewing various ways of planning new cowsheds and suggestions for adapting old ones to present requirements. A copy of the Standards adopted by the County Council is given below :—

### DAIRIES AND COWSHEDS.

Milk and Dairies (Consolidation) Act, 1915.

Milk and Dairies (Amendment) Act, 1922.

Milk and Dairies Order, 1926.

### COUNTY STANDARD OF ADMINISTRATION.

The production of Clean Milk necessitates strict attention to the following points :—

#### **Cleanliness of Cattle.**

1. Cows must be kept clean, especially the flanks and the udders.
2. Not more than half-an-hour before milking, the cows' flanks should be groomed with a clean damp brush till they show no visible signs of dirt.
3. The udders and teats must be washed with clean warm water and wiped with a clean moist cloth before milking : these cloths to be used for the udders only, and never for the flanks.
4. Long hairs on the flanks and udders to be clipped.

#### **Milking.**

1. Wet milking should not be permitted.
2. Milkers should wash their hands and fore-arms before milking and also during milking should they become soiled.
3. Clean, washable overalls (jackets and "split" aprons) and caps should be worn by milkers during milking.
4. Milking stools must be washed and kept clean, otherwise the hands of the milkers will become soiled.
5. The foremilk should be milked into a separate vessel and discarded.

6. The use of hooded pails is strongly recommended, or, as a substitute, fix a clean straining cloth over the pail and allow the milk to pass through it during milking.

N.B.—Straining is not necessary if milk is cleanly produced. Straining takes out the visible dirt only, but does not remove the bacteria on which milk is judged. If a strainer is used, it is essential that it should be perfectly clean.

### **Care of Milk after Milking.**

1. Bacteria rapidly multiply in warm milk, therefore it is essential to cool milk immediately. Milk should be kept in a covered vessel until the milking is finished, when it should be at once cooled.

2. The milk, after cooling, should be kept cool by allowing the covered churn to stand in cold water until the milk is sent away.

3. Immediately after use, all pails, churns, etc., should be thoroughly washed out with clean cold water, then scalded with steam or boiling water and turned upside down to drain. The vessels should *not* be wiped out with a cloth after scalding.

## **DAIRY.**

**Where Milk is stored in a Dairy,** a separate dairy wash-house should be provided. The construction of a division wall across the existing dairy usually answers this purpose, providing light and ventilation to both places is available. The division wall should be constructed of bricks faced with cement and sand to a smooth surface, or concrete partition slabs. A doorway should be provided in the division wall for access from the dairy to the dairy wash-house. The dairy should be entered from outside.

The dairy and dairy wash-house must have no direct communication with any other room.

**In cases where no Milk is stored** during the day, a combined dairy and dairy wash-house would be sufficient.

Hot water, where possible, should be piped into the dairy wash-house from an outside boiler or a copper fired from the outside, or from the back boiler of a kitchen fire-range. A large deep glazed stoneware or galvanised iron sink should be provided, with a suitably-trapped waste-pipe (fitted with cleansing screw) discharging over a properly-trapped outside gulley connected to the drainage system.

Where possible, both hot and cold water should be laid on to taps over the sink.

The dairy should be constructed as far as possible in such a position as not to receive the direct rays of the sun.

### **Walls.**

The walls should be of brick rendered with cement and sand to a smooth surface, or concrete slabs.



**Floor.**

To be of cement concrete trowelled to a smooth surface and rounded off at all angles, and laid to a suitable gradient to discharge on to the outside gulley.

**Roof.**

The roof should be covered with slates, tiles, or asbestos sheeting, and the underside should be underdrawn in the case of slating or tiling or boarded with T. & G. boarding so as to be dust-proof.

**Light and Ventilation.**

The dairy should be efficiently lighted and ventilated by means of windows and air grates. Source of ventilation should be protected by fine mesh gauze.

**Benching.**

Instead of benching, it is suggested that galvanized iron tubing should be used. A couple of such rails above the floor could hold the inverted churns, and two more rails above these could be placed in a similar manner for the pails, lids, etc. No wooden benching or table should be used in a dairy.

The dairy should not be situate near a manure pit, privy, pail closet, or ashpit.

All woodwork (doors, window frames, and boarded ceiling) in a dairy should be painted, and the walls and the ceiling, if plastered, should be limewashed as often as is necessary.

No clothing, litter, or rubbish, or washing utensils for domestic washing should be placed in a dairy or dairy wash-house.

Milk must not be stored in any scullery or living room.

**NEW COWSHEDS.**

In the case of all new cowsheds to be built, or old sheds being remodelled, the following details are given to assist in the provision of a suitable cowshed:—

**Air space.** 800 cubic feet per cow.

**Lighting.** Three square feet of window space per cow. Roof lighting is an advantage, in addition.

**Ventilation.** This is best provided by forming the lower portion of the wall windows in the form of a glazed hopper, hinged at the bottom, to fall inwards. Outlets can be formed by raised ridge tiles.

The object is to provide a change of air in the shed without draught.

Holes in walls are draughty unless a deflection board is fixed on the inside.

**Size** (Internal).

<i>Single row Cowshed.</i>					<i>Minimum.</i>
Feeding passage	...	...	...	...	4' 0"
Feeding trough—allow say	...	...	...	...	1' 9" over all
Standing from front of trough to heelstone...					5' 3"
Dung channel	...	...	...	...	3' 0"
Urine channel	...	...	...	...	0' 6"
Milking or rear passage	...	...	...	...	5' 6"
Total minimum width					20' 0"

In the case of a double-row cowshed having two *feeding* passages and one central passage, the minimum width is 34' 0".

For a double-row cowshed having two passages and one central *feeding* passage, the minimum width is 36 feet.

**Length.** Allow 7 feet for each double stall and 4 feet for each single stall.

**Walls** should be of brick, stone, or concrete, and the internal surface of the walls to a height of 5' 9" should be rendered in cement to form a dado. This cement face should be tarred.

The low wall, if any, at the head of the feeding troughs, if formed of brick or stone, should be rendered in cement on the trough side.

Wooden walls for new cowsheds should not be permitted.

**Windows** should allow a minimum of three square feet per cow. The windows are best formed as a glazed hopper, the upper two-thirds of the window being fixed and the lower one-third forming a *glazed* hopper, hinged at the bottom and made to fall inwards. This method of construction tends to prevent down-draught, especially where the walls are thick.

Roof lighting is very good, in addition to the ventilating windows.

**Roof.** Should be covered with slates or asbestos. Raised ridge tiles provide an extra means of ventilation.

**Feeding Troughs** should be made of glazed earthenware or concrete, with rounded corners. Where half pipes are used, they should be tilted up at the back and bedded in concrete.

**Stall Divisions** (Boskins). Should preferably be made of concrete or galvanized iron tubing. If formed of wood, the same should be well tarred.

**Floors** should be formed of some durable and impervious material without joints, such as concrete, finished with a "brush finish." It is advisable to pave the whole of the stall floors up to the troughs. Some cowkeepers object to paving the standings up to the trough, but this practice of complete paving tends to greater cleanliness. At any rate, the stall should be paved at least half way from the heelstone.

**The heelstone** should not be less than six inches in height.

**The dung bench** should be three feet wide, with a slight slope to a small urine channel.

**Urine Channel** of half-round section and about 6" wide. The floor from the heelstone to the rear wall may be formed into one gentle double slope, the urine being allowed to flow along the slight hollow channel formed in the dip of the double slope.

The whole of the floor should have a slight fall to one or more outlets, according to the length of the shed, and formed so as to discharge any liquid on to a properly trapped gulley outside, connected to a suitable drain.

**Water Supply.** If sufficient water is available, it is advisable to have the water laid on to a tap at the head of the urine channel for the purpose of the daily swilling of the floor.

Automatic drinking bowls for the cows are a great asset.

**Loft.** There should be no loft over the standings for the purpose of "keeping the cows warm." There is no great objection to a proper store place, hay loft, or room over the cowplace provided the floor is properly constructed so that the ceiling of the cowplace can be kept clean and that the air-space is sufficient for the number of cows intended to be housed. A room over a cowshed, however, prevents lighting and ventilation being provided in the roof.

**Paving.** If the whole yard is not paved, at least a good concrete footpath should be provided for cleanly access to the shed.

**Manure Dump.** The manure dump should be placed well away from the shed or dairy, and in such a position that the cows do not walk into it.

The dump should have a concrete floor and dwarf walls on three sides. The inner surfaces of the walls should be smooth and free from "pockets"

The liquid from the dump should be capable of being collected for use.

The use of a "throwing out" door in the wall of the cowshed is not satisfactory

**Cesspool.** Where a cesspool has to be used to receive the drainage, and the ground where the cesspool is placed has a good slope, a satisfactory method of emptying the cesspool is by means of a 4" pipe (with a controlling valve) laid from the bottom of the cesspool until, with a normal fall, the pipe track comes well above ground. The tank can then be emptied by the valve and pipe straight into a sludge cart without pumping.

A cesspool need not be deep. An oblong or rectangular tank, having a " V " bottom, fitted with a sludge valve similar to a modern sewage disposal works tank, is quite satisfactory.

### EXISTING COWSHEDS.

Before an existing cowshed can be considered structurally satisfactory, the following requirements should be attended to:—

**Air space.** 600 cubic feet per cow should be aimed at, where possible, but slightly less might be allowed where the ventilation and lighting are good.

**Lighting and Ventilation** can generally be provided by windows the lower one-third of which is made in the form of a *glazed* hoppe, window, hinged at the bottom to fall inwards. This method, especially where the walls are thick, prevents a draught on to the eows, which would occur if the upper portion were made to open instead of the lower one.

At least  $1\frac{1}{2}$  square ft. of window-space per cow should be allowed, but preferably 3 square ft. where possible.

Roof lighting is very satisfactory where it can be adopted.

Where there are existing draught holes in the walls, a deflecting board placed on the inner side of the wall will often prevent draught from the hole.

Where the existing ceiling is low, the loft floor ought to be raised. If this cannot be done, a wooden ventilating shaft might improve the conditions, if carried up through the loft and roof, or, as an alternative, the loft floor-boards should be cut out for a distance of 3 ft. from the wall, over the heads of the cows.

**Floors.** The material for relaying floors should be as before described.

Where the existing floor is of good stone flags, perhaps levelling or trueing up and cement pointing will make a satisfactory floor.

All drain openings in sheds should be removed to the outside and properly trapped there.

The same remarks apply here as mentioned previously under " New Cowsheds " as to paving the standings, heelstone, channeling, etc.



Where the floors are defective and have to be entirely re-made, and there is a feeding passage but insufficient space behind the cows, it is well to consider the suggestion of putting the troughs up to the wall so as to provide a cleaner milking passage and rear wall surface.

In other cases where the rear passage is narrow, the floor behind the heelstone may be formed in a gentle slope towards the rear wall with a small urine channel formed alongside the base of the wall, discharging over the outside gulley, or, the floor may be formed with a double slope as described under the heading of " Floors " in " New Cowsheds."

**Walls.** The interior surface of existing cowshed walls should, where the surface is uneven, be rendered in cement in the form of a dado about 5' 9" high and the surface smoothed and tarred so that the manure can be easily cleaned off.

**Water Supply.** (As for new Cowsheds).

**Lofts.** The same remarks apply as in the case of New Cowsheds. No hen lofts to be permitted.

**Paving.** The yard surface should be made so that it can be kept reasonably clean. Any defective paving of the footpaths should be made good so as to facilitate cleansing.

**Manure Dump.** This should not be placed at the door of the cowshed.

Where a " throwing out door " exists, it should be made into a glazed hopper window and the dump removed to a more suitable position.

Where the dump is in the yard, and not enclosed, the dump should be enclosed by dwarf walls, as before mentioned, and have a concrete floor.

It is much more satisfactory if the dump is placed well away from the cowsheds and the dairy.

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It is my pleasure to be able to record that the County Sanitary Inspectors were well received by both cowkeepers and the Local Inspectors.

The following is a summary of the conditions found when the inspections were made :—

TABLE XXXVI.

		Bakewell Urban. (whole.)	North Darley Urban. (whole.)	Matlocks Urban. (whole.)	Wirksworth Urban. almost whole.	Ashbourne Rural. (3 Parishes).	Bakewell Rural. (half.)	Belper Rural. (portion only)	TOTAL
SHED LIGHTING.									Sheds.
Sufficient	...	15	27	13	15	2	211	17	300
Insufficient	...	30	33	44	30	38	137	33	345
None	...	8	13	9	1	5	39	7	82
SHED VENTILATION.									
Sufficient	...	29	35	43	30	14	287	53	491
Insufficient	...	22	32	19	14	28	69	4	188
None	...	2	6	4	2	3	31	—	48
SHED DRAINAGE.									
Satisfactory	...	32	38	45	34	33	321	52	565
Defective	...	11	25	16	7	12	43	5	119
None	...	10	10	5	5	—	23	—	43
SHED PAVING.									
Satisfactory	...	22	30	20	14	12	278	20	396
Defective	...	31	43	46	32	33	109	37	331
STANDING PAVING.									
Satisfactory	...	26	53	18	16	17	350	23	503
Defective	...	27	20	48	30	28	37	34	224
FEEDING TROUGHS.									
Satisfactory	...	34	56	62	34	40	302	57	585
Defective	...	10	13	4	10	5	26	—	68
None	...	9	4	—	2	—	59	—	74
LOFT OVER.									
None	...	20	29	12	19	23	158	42	303
Yes, Satisfactory	...	25	25	43	19	20	229	8	369
Yes, Unsatisfactory	...	8	19	11	8	2	—	7	55
AIR-SPACE when fully occupied according to the number of standings :—									
Over 600 c. f. per cow	...	11	20	17	13	16	127	23	227
500-600	...	7	9	6	6	9	52	18	107
400-500	...	15	20	9	9	9	69	5	136
300-400	...	15	18	28	12	11	109	11	204
200-300	...	5	6	6	6	—	28	—	51
100-200	...	—	—	—	—	—	2	—	2
WATER SUPPLY.									
Public	...	21	42	28	13	23	212	43	382
Well or Spring	...	13	31	38	29	22	141	14	288
Rain water only	...	19	—	—	4	—	34	—	57
MANURE DUMP.									
Satisfactory	...	34	65	46	21	28	325	42	561
Unsatisfactory	...	19	8	20	25	17	62	15	166
CLEANLINESS OF COWS.									
Clean	...	Out	Out	Out	Out	Out	307	Out	—
Fair	...	—	—	—	—	—	57	—	—
Dirty	...	—	—	—	—	—	23	—	—

	Bakewell Urban (whole).	North Darley Urban (whole).	Matlocks Urban (whole).	Wirksworth Urban almost whole.	Ashbourne Rural (3 Parishes).	Bakewell Rural (half).	Belper Rural (portion only)	TOTAL.
CLEANLINESS OF SHEDS.								
Clean ... ..	28	58	26	19	25	233	40	429
Fair ... ..	17	9	32	12	8	118	17	213
Dirty ... ..	8	6	8	15	12	36	—	85
INTERNAL WALLS.								
Needing rendering in cement ...	30	36	45	38	—	89	4	242
NUMBER OF SHEDS								
INSPECTED ...	53	73	66	46	45	387	57	727
DAIRY.								
Satisfactory ...	5	13	7	4	13	100	7	farms. 149
Unsatisfactory ...	6	11	11	13	5	11	10	67
None ... ..	17	17	16	12	4	99	6	171
NUMBER OF FARMS ...	28	41	34	29	22	210	23	387

DAIRIES, COWSHEDS, AND MILKSHOPS.  
TABLE XXXVII.

<i>Urban Districts.</i>	<i>Number on Register.</i>	<i>Inspec- tions made.</i>	<i>Notices served.</i>	<i>Nuisances abated.</i>
Alfreton ... ..	41	362	46	20
Alvaston & Boulton	12	17	2	2
Ashbourne ... ..	27	67	12	15
Bakewell ... ..	29	93	36	7
Baslow ... ..	10	2	—	—
Belper ... ..	42	80	—	4
Bolsover ... ..	52	36	14	16
Bonsall ... ..	38	85	17	18
Brampton & Walton	75	114	—	19
Buxton (Boro') ...	71	435	—	7
Chesterfield (Boro')	262	212	4	4
Clay Cross ... ..	31	38	13	22
Dronfield ... ..	8	16	2	2
Glossop (Boro') ...	90	561	18	17
Heage ... ..	27	30	—	—
Heanor ... ..	101	58	14	17
Ilkeston (Boro') ...	9	24	—	—
Long Eaton ... ..	40	102	8	14
Matlocks ... ..	166	254	74	54
New Mills ... ..	84	30	—	—
North Darley ... ..	43	75	30	—
Ripley ... ..	52	65	—	4
South Darley ... ..	18	18	18	18
Swadlincote ... ..	55	101	58	—
Wirksworth ... ..	52	82	48	48

  

<i>Rural Districts.</i>	<i>Number on Register.</i>	<i>Inspec- tions made.</i>	<i>Notices served.</i>	<i>Nuisances abated.</i>
Ashbourne ... ..	480	210	60	30
Bakewell ... ..	463	886	120	448
Basford ... ..	21	32	7	7
Belper ... ..	373	265	28	73
Blackwell ... ..	359	410	15	23
Chapel-en-le-Frith...	342	188	102	89
Chesterfield ... ..	792	424	240	424
Clowne ... ..	92	192	4	4
Glossop Dale ... ..	60	115	3	3
Hartshorne & Seals	113	185	90	69
Hayfield ... ..	48	74	1	1
Norton ... ..	113	120	53	19
Repton ... ..	188	382	8	42
Shardlow ... ..	376	102	34	34
Sudbury ... ..	202	220	—	—



## CLEAN MILK COMPETITIONS.

For a considerable number of years an effort has been made to encourage the production of clean milk by instituting clean milk competitions. These competitions were carried out under the auspices of the County Agricultural Institute and organised by the County Agricultural Organiser, Mr. J. R. Bond, M.Sc., who reports as follows:—

“ Clean milk is not the same as cleaned milk, but is the uncontaminated secretion of clean, healthy cows. Having been milked and handled with strict regard to the exclusion of microscopic contamination, it contains no visible sediment, and its bacterial count is so low that it keeps sweet and wholesome for at least three days at ordinary room temperatures, and may be consumed in its most health-giving and nutritive state—untreated and uncooled.

Cleaned milk, on the other hand, may have been rendered free from sediment by filtration or by centrifugal treatment, which also extracts some of the nutritive solids of the product. Such milk may also have had a high bacterial content reduced by heat treatment, commonly called Pasteurisation, thereby retarding the souring which such milk would ordinarily evince within two days after milking. Heat treatment is also detrimental to the nutritive properties of milk.

Much of the milk consumed in the larger centres of population is both clarified and heat-treated before being retailed. The city distributing concerns are equipped for these processes, probably having found them necessary for the satisfactory distribution of such milk as was commonly produced a decade or so ago. During the intervening time, however, great progress has been made in knowledge of the production of clean milk, and this knowledge has been widely disseminated among farmers. There is, therefore, now a large potential supply of milk available which would not require to be treated before distribution, and it is an urgent problem to replace the cleaned milk with the clean quality. The chief obstacle to this goal, however, is the fact that few buyers are prepared to re-organise their business by purchasing and distributing only milk of such purity that it requires no treatment. Clean milk costs more, and must necessarily cost more, at the farm than milk produced under conditions where labour economy is of chief moment.

The milk producer may, as a business man, deem it most profitable to concentrate on the production of cheap milk. The limits to the economies he may effect in the process are set out by the Milk and Dairies Orders and the conditions of his milk contract. If he is determined to produce clean milk, however, he must incur additional expense in labour and otherwise which on commercial principles he must recover in the sale of the superior product.

Mere compliance with the statutory obligations with regard to cleanliness in cowsheds and dairies will not ensure milk of the quality here implied by the word clean. For example, it is not obligatory

to clip the hair off the flanks and udders of the cows or to wash these parts in two waters as a matter of routine before each milking; milking in covered pails, admittedly less convenient to use than open-mouthed vessels, is not compulsory; and it is not obligatory to steam-sterilise all milk utensils twice daily, observing certain principles concerning temperature and time; clean overalls and caps for all milkers are another extra. But even equipment and routine methods may fail to secure low bacterial count and freedom from coliform organisms unless everyone concerned in the process is keen and careful to avoid all possible sources of contamination.

There are now many farmers in this County who have learnt all the above methods and principles of clean milk production and practised them for the limited period of a competition and whilst still optimistic of finding a buyer of clean milk. The fact that not all past competitors continue to practise them in their entirety is because of the regrettable fact that the majority of buyers prefer to buy ordinary milk at a low price and to clarify and pasteurise it.

Another consideration may to some extent affect the large distributor. He buys from a large number of farmers, and the milk of these is mixed in the course of handling at the dépôt, and it is not convenient to keep the milk of individual farmers separate.

The practice of clarifying and pasteurising then allows of the marketing of milk which was not of the highest practicable standard of purity. Treatment at a dépôt near the source, combined with brine cooling, permits of mixed milk being brought into an area from considerable distances, and this may operate unfairly against local producers and stultify the efforts of a local sanitary authority to improve the conditions and methods of production in its area.

In spite of commercial discouragement, the clean milk movement receives considerable support from the producers' side, and the 1930 competitions were very successful both in numbers of entrants and in the standard of performance of the competitors. The methods of conducting the competition have been explained in previous reports, the only change in the past year having been the subdivision of the first year candidates into large and small herds-owners.

The five or six surprise samples of milk were taken from each of the 70 competitors, but detailed inspection of herds, premises and methods by the outside judge was necessarily limited to 21 farms, in respect of which a score card was filled in.

The results of the competition were given in "The Derbyshire Farmer" for September, 1930.

The standard of marking was higher in the County Championship than in the other classes, these competitors having previously attained a certain efficiency in a previous contest. It may be noted that to win in this class, competitors must produce on every occasion milk that is still of certified standard at the end of 24 hours' keeping at such temperatures as prevail in railway parcel vans and offices in the middle of summer.

The Inspecting Judge's remarks are as follows :—

### INSPECTING JUDGE'S REPORT.

At the invitation of the Agricultural Organiser, I was privileged to act as Inspecting Judge of the Derbyshire Better Milk Competition, 1930.

A score card was used for judging, the marks being awarded entirely on methods used in milk production, no attention being paid to the type of buildings on the various farms.

Twenty-one farms were judged, ten in the Championship Class, six in the Small Herds Class, and five in the Large Herds Class. In this report the three classes will be considered together.

**Management of Cowsheds and Cows.** With one or two exceptions, the cowsheds on the farms inspected were anything but model in construction, and were typical of the average cow byre. The sheds were kept in a reasonably clean condition on all the farms.

The fact that milk of very high standard of cleanliness was being produced in these relatively poor cowsheds affords ample proof that model buildings are certainly not essential for the production of high quality milk.

The efficiency of the methods used for cleaning the cows before milking varied considerably from farm to farm. On some of the farms the whole of the hind quarters were thoroughly washed and dried before milking commenced. The importance of washing the udders was thoroughly understood on all the farms visited. In many cases the necessity for maintaining the pails and cloths used for washing the udders in a sanitary condition was overlooked. Clipping the udders, which greatly facilitates the maintenance of cleanliness, especially in winter time, was practised only on a very few farms.

**Management of Milk Room and Utensils.** On most farms a small dairy used solely for milk was available, and this was invariably kept in a very clean condition. On one or two farms the cooling was done in lean-to sheds with open sides. In such cases the milk is often subjected to contamination from dust particles, and it is highly desirable that they should be boarded in.

Preliminary washing of all utensils was efficiently done on all the farms visited, and in most cases steam was used for sterilising. On a few farms, low pressure boilers and steaming chests were being used. It was interesting to note the large number of farms which were using a farm copper fitted with a steaming chest for sterilising their utensils. Very few of these improvised steaming chests were provided with a thermometer. As steam is of very low efficiency as a sterilising agent until it reaches a temperature of between 205° and 210°F., the time required for efficient sterilisation, in the absence of a thermometer, is very difficult to gauge. Steaming of utensils at 205° to 210° F. for ten minutes is sufficient for



sterilisation of dairy utensils. When there is no thermometer, it is very difficult to specify a time for steaming, as the time taken for the temperature of the steaming chest to reach 205° F. is dependent upon so many factors, and will vary considerably from farm to farm.

On a few of the farms, where boiling water was used for sterilising the utensils, the operation was formed just prior to milking. Such procedure is very advantageous, as there is no time for the multiplication of any bacteria which have not been killed before the next milking.

In several cases the churns were not treated, as it was the impression that these were properly sterilised before leaving the factory. In many cases churns are subjected to very meagre treatment before being returned to the farms, and they should certainly either be sealed or steam-sterilised before being used again.

**Milking and subsequent handling of the Milk.** On most of the farms the milkers wore overalls. Without exception, the fore milk was discarded and dry-handed milking was practised.

Cooling was general on all the farms. One farm was equipped with a brine cooling outfit, but the majority used ordinary tubular coolers. In some cases the milk was cooled by standing the churns in cold water, and in one case a special ice compartment attached to the inside of the churn lid was used to keep the milk cool overnight. Every effort was made on all the farms to keep the milk cool prior to transportation.

**Conclusion.** A very high standard of efficiency had been attained on all the farms judged. It was obvious that the competitors and the milkers thoroughly understood their job, and showed a keen personal interest in their work. It is this personal factor which is so important if a high quality article is to be produced.

In conclusion, I should like to thank the Agricultural Organiser and his staff for facilitating my visits to the farms, and the competitors for the courtesy with which I was received.

A. ROWLANDS,  
*Inspecting Judge.*

The clean milk competitions are being continued and extended during the present year, with the following number of entries and prizes :—

			<i>Entries.</i>	<i>Prizes.</i>
Class A.	County Championship	...	14	£10 10 0
B.	Small Herds	... ..	13	5 5 0
C.	Larger Herds	... ..	21	7 17 6
D.	Chesterfield Retailers	...	10	7 15 0
			—	—
	Total	...	58	£31 7 6
			—	—



## FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Mr. John White, F.I.C., the County Analyst, reports on the work carried out under the Act as follows :—

The collection of samples for analysis under the above Act is made by Sampling Officer William Etchells, who is a whole-time Officer, duly appointed by the County Council under the Food and Drugs (Adulteration) Act. In addition, he acts as Official Sampler and Inspector under the Fertilisers and Feeding Stuffs Act, 1926. His work is supervised by me as County Analyst and Agricultural Analyst, and he collects the samples day by day throughout the year. Arrangements are made whereby the County is covered as systematically as possible.

The following is a summary of the work done during the year 1930 :—

<i>Total Samples analysed.</i>	<i>Percentage adulterated.</i>	<i>Milk samples.</i>	<i>Percentage adulterated.</i>
2093	1.3	708	4.9

The average composition of the Milk samples was as follows :—

<i>Non-fatty solids.</i>	<i>Fat.</i>	<i>Total solids.</i>
8.80	3.65	12.45

## THE PUBLIC HEALTH (PRESERVATIVES IN FOOD) REGULATIONS.

Under these regulations, the only preservative substances permitted to be added to foodstuffs are Sulphur Dioxide and Benzoic Acid, the addition being controlled by a Schedule stating the maximum amount of each, which may be added to certain specified articles of Food. Any article of Food not included in the Schedule must be sold free from Preservatives.

The whole of the samples of Milk, Butter, Cream, and Margarine were free from Preservatives.

In addition to the articles named in the last paragraph, 312 samples of various materials were specially examined for the presence of Preservatives.

The provisions of these Regulations appear to be well observed by Traders in the County, and no serious infringement of these Regulations was found during the year.

**WATER.** The Urban and Rural District Councils in the County submit for analysis samples of water, under an arrangement made by the Public Health Committee, whereby they are analysed at nominal fees.

The number of samples received during 1930 was 171.

Samples of Water, Sewage Effluents, etc., are periodically submitted to me on behalf of the Public Health Committee, and general chemical work is undertaken for the various Committees of the County Council, as required.

JOHN WHITE, F.I.C.,  
County Analyst.

# PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

**Notifiable Diseases.** The following Table, compiled at the request of the Ministry of Health, shews the incidence of notifiable diseases in the County during the year 1930 :—

TABLE XXXVIII.

	<i>Total Cases Notified.</i>	<i>Cases admitted to Hospital.</i>	<i>Deaths.</i>
Smallpox ... ..	131	125	—
Scarlet Fever... ..	2,207	1,508	7
Diphtheria ... ..	1,011	778	60
Enteric Fever ... ..	26	13	5
Puerperal Fever ... ..	38	25	18
Puerperal Pyrexia ... ..	92	25	—*
Pneumonia ... ..	—*	—*	387
Cerebro-spinal Fever ... ..	—*	—*	—*
Erysipelas ... ..	272	—*	—*
Ophthalmia Neonatorum ... ..	66	9	—
Encephalitis Lethargica ... ..	10	1	18
Measles ... ..	—*	—*	56
Chickenpox ... ..	—*	—*	—*

\* No information available.

Further particulars are given in Table XIV, where the number of cases of infectious diseases notified in each Hospital District are set out.

TABLE XXXIX.

Shewing the number of Cases, the number of Deaths given by Registrar-General, the case rate per 1,000 of population and the case mortality per cent from Smallpox, Scarlatina, Diphtheria and Typhoid Fever.

URBAN DISTRICTS.	SMALLPOX.				SCARLATINA.				DIPHTHERIA AND MEMBRANOUS CROUP.				TYPHOID FEVER.			
	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.
Alfreton ...	41	...	1.89	...	89	...	4.11	...	22	3	1.01	13.64	2	...	.09	...
Alvaston & Boulton ...	...	...	...	...	9	...	3.89	...	13	2	5.61	15.38	...	...	...	...
Ashbourne ...	...	...	...	...	...	...	...	...	...	1	...	100.00	1	1	2.22	100.00
Bakewell ...	...	...	...	...	5	...	1.58	...	1	...	.32	...	...	...	...	...
Baslow ...	...	...	...	...	3	...	3.55	...	...	...	...	...	...	...	...	...
Belper ...	...	...	...	...	36	...	2.75	...	4	1	.30	25.00	...	1	...	100.00
Bolsover ...	4	...	.31	...	56	1	4.39	1.78	2	1	.15	50.00	2	1	.15	50.00
Bonsall ...	...	...	...	...	1	...	.83	...	1	...	.83	...	...	...	...	...
Brampton & Walton ...	...	...	...	...	2	...	.88	...	1	...	.44	...	...	...	...	...
Buxton (Boro') ...	...	...	...	...	121	1	7.10	.82	80	1	4.69	1.25	...	...	...	...
Chesterfield (Boro') ...	12	...	.18	...	265	...	4.05	...	169	15	2.58	8.87	4	1	.06	25.00
Clay Cross ...	59	...	6.76	...	40	...	4.58	...	16	1	1.83	6.25	...	...	...	...
Dronfield ...	...	...	...	...	10	...	2.22	...	2	...	.44	...	...	...	...	...
Glossop (Boro') ...	...	...	...	...	15	...	.76	...	27	1	1.36	3.70	2	...	.10	...
Heage ...	1	...	2.27	...	2	...	4.54	...	1	1	2.27	100.00	...	...	...	...
Heanor ...	1	...	.04	...	70	1	3.03	1.42	8	...	.34	...	...	...	...	...
Ilkeston (Boro') ...	1	...	.03	...	103	...	3.09	...	10	...	.30	...	...	...	...	...
Long Eaton ...	1	...	.04	...	121	...	5.43	...	6	...	.27	...	...	...	...	...
Matlocks ...	...	...	...	...	2	...	.20	...	23	2	2.36	8.69	...	...	...	...
New Mills ...	...	...	...	...	11	...	1.22	...	2	...	.22	...	...	...	...	...
North Darley ...	...	...	...	...	9	2	2.14	22.22	8	...	1.90	...	...	...	...	...
Ripley ...	...	...	...	...	11	...	.78	...	9	1	.64	11.11	1	...	.07	...
South Darley ...	...	...	...	...	2	...	2.96	...	...	...	...	...	...	...	...	...
Wadlincote ...	...	...	...	...	53	...	2.51	...	38	...	1.80	...	1	...	.04	...
Wirksworth ...	...	...	...	...	9	...	.23	...	64	1	1.63	1.56	...	...	...	...
<i>Urban Districts</i> ...	120	...	0.37	...	1045	5	3.24	.47	507	31	1.57	6.11	13	4	.04	30.77
RURAL DISTRICTS.	SMALLPOX.				SCARLATINA.				DIPHTHERIA AND MEMBRANOUS CROUP.				TYPHOID FEVER.			
	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.	No. of Cases.	No. of Deaths.	Case rate per 1,000 of population.	Case mortality per cent.
Ashbourne ...	...	...	...	...	13	...	1.23	...	12	2	1.14	16.66	1	...	1.14	...
Bakewell ...	...	...	...	...	33	...	1.75	...	10	1	.53	10.00	2	...	.10	...
Basford ...	...	...	...	...	4	...	2.25	...	...	...	...	...	...	...	...	...
Belper ...	...	...	...	...	67	1	2.64	1.49	21	...	.82	...	1	...	.03	...
Blackwell ...	3	...	.06	...	346	...	7.74	...	58	3	1.29	5.17	1	...	.02	...
Chapel-en-le-Frith ...	...	...	...	...	36	...	2.13	...	10	...	.59	...	...	...	...	...
Chesterfield ...	7	...	.08	...	273	1	3.22	.36	290	17	3.42	5.86	5	1	.06	20.00
Flowne ...	...	...	...	...	104	...	5.57	...	14	...	.78	...	...	...	...	...
Glossop Dale ...	...	...	...	...	2	...	.51	...	...	...	...	...	...	...	...	...
Hartshorne & Seals ...	...	...	...	...	20	...	2.22	...	2	...	.22	...	...	...	...	...
Mayfield ...	...	...	...	...	11	...	2.48	...	2	...	.45	...	...	...	...	...
Morton ...	...	...	...	...	15	...	2.64	...	3	1	.53	33.33	1	...	.18	...
Repton ...	...	...	...	...	82	...	4.48	...	16	1	.87	6.25	2	...	.11	...
Shardlow ...	1	...	.02	...	146	...	3.96	...	61	3	1.65	4.91	...	...	...	...
Wadbury ...	...	...	...	...	10	...	3.96	...	5	1	1.98	20.00	...	...	...	...
<i>Rural Districts</i> ...	11	...	.03	...	1162	2	3.84	.17	504	29	1.66	5.75	13	1	.04	7.69
<i>Urban Districts</i> ...	120	...	.37	...	1045	5	3.24	.47	507	31	1.57	6.11	13	4	.04	30.77
<i>Whole County</i> ...	131	...	.21	...	2207	7	3.53	.32	1011	60	1.61	5.93	26	5	.04	19.23

TABLE XL.

**Cases of Notifiable Diseases notified during 1930**  
as reported by the Local Medical Officers of Health.

Urban Districts.	Tuberculosis.		Small-Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puer-peral Fever.	Puer-peral Pyrexia	Cerebro-Spinal Fever.	Erysipelas.	Ophth. Neon.	Enceph. Letharg.
	Pulmonary.	Other										
Alfreton .. ..	8	12	42	91	23	2	3	4	..	11	4	..
Alvast'n & Boul't'n	4	1	..	12	14	..	..	..	..	1	..	..
Ashbourne .. ..	6	5	..	..	..	1	..	..	..	3	..	..
Bakewell .. ..	7	2	..	5	1	..	..	..	..	..	..	1
Baslow .. ..	..	..	..	3	..	..	..	..	..	..	..	..
Belper .. ..	14	7	..	34	4	..	1	..	..	11	1	..
Bolsover .. ..	13	14	4	56	2	2	2	5	1	7	3	..
Bonsall .. ..	..	1	..	..	1	..	..	..	..	..	..	..
Brampt'n & Walt'n	1	1	..	2	1	..	..	..	..	..	..	..
Buxton (Boro') ..	20	5	..	109	75	..	..	4	..	4	..	..
Chesterfield (Boro')	64	27	10	263	168	4	8	8	..	29	7	2
Clay Cross .. ..	4	..	57	40	16	..	1	1	..	3	..	..
Dronfield .. ..	2	1	..	10	2	..	1	1	..	6	..	..
Glossop (Boro') ..	18	7	..	14	27	2	..	..	..	5	..	..
Heage .. ..	5	1	1	3	1	..	..	1	..	4	..	..
Heanor .. ..	24	10	1	70	8	..	..	1	..	8	1	..
Ilkeston (Boro') ..	16	9	1	100	11	..	..	5	..	6	2	..
Long Eaton .. ..	38	7	1	118	6	..	2	..	..	5	1	..
Matlocks .. ..	9	1	..	4	27	..	..	..	..	..	..	..
New Mills .. ..	1	8	..	11	1	..	..	1	..	4	1	2
North Darley .. ..	8	4	..	9	7	..	1	..	..	1	1	..
Ripley .. ..	6	4	..	10	8	..	..	2	2	9	3	..
South Darley .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Swadlineote .. ..	21	15	..	53	38	1	2	7	..	12	2	..
Wirksworth .. ..	5	2	..	10	63	..	..	2	..	..	1	1
<i>Urban Districts</i>	294	144	117	1027	504	12	21	42	3	129	27	6

  

Rural Districts	Tuberculosis.		Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puer-peral Fever.	Puer-peral Pyrexia	Cerebro-Spinal Fever.	Erysipelas.	Ophth. Neon.	Enceph. Letharg.
	Pulmonary.	Other.										
Ashbourne .. ..	9	3	..	13	9	..	2	2	..	11	1	..
Bakewell .. ..	11	8	..	30	10	2	..	4	..	5	1	..
Basford .. ..	3	..	..	4	1	..	..	..	..	2	..	..
Belper .. ..	10	13	..	63	21	1	..	3	..	12	6	..
Blackwell .. ..	43	27	2	342	57	1	3	6	..	27	5	1
Chapel-en-le-Frith	8	5	..	35	10	..	..	3	..	5	..	..
Chesterfield .. ..	54	31	7	260	283	5	10	13	..	33	20	2
Clowne .. ..	19	12	..	104	13	..	..	5	..	8	..	..
Glossop Dale .. ..	2	1	..	2	..	..	..	2	..	1	..	..
Hartshorne & Seals	12	4	..	21	1	..	..	..	..	2	..	..
Hayfield .. ..	5	3	..	11	1	..	..	1	..	6	..	..
Norton .. ..	4	4	..	15	3	1	1	..	..	4	..	1
Repton .. ..	5	9	..	84	16	2	1	2	..	8	..	..
Shardlow .. ..	30	6	1	142	59	..	1	5	..	20	6	..
Sudbury .. ..	..	3	..	10	5	..	..	..	..	..	..	..
<i>Rural Districts</i>	215	129	10	1136	489	12	18	46	..	144	39	4
<i>Urban Districts</i>	294	144	117	1027	504	12	21	42	3	129	27	6
<i>Whole County</i>	509	273	127	2163	993	24	39	88	3	273	66	10



**Smallpox.**—The following Table shows the number of cases of Smallpox as given by the Registrar General during the years 1921—1930 inclusive, and shows that although the disease is still prevalent, there was a marked decrease in 1930:—

TABLE XLI.

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
<i>Urban Districts.</i>										
Alfreton ... ..	...	...	23	1	...	2	123	130	108	41
Alvaston & Boulton	...	...	...	...	18	1	...	4	3	.
Ashbourne ... ..	...	...	...	...	...	...	...	1	...	...
Belper ... ..	...	1	1	...	2	70	103	36	63	...
Bolsover ... ..	...	15	19	36	7	19	...	78	120	4
Brampton & Walton	...	...	...	...	...	...	1	...	...	...
Chesterfield (Boro')	...	...	32	518	76	2	8	11	24	12
Clay Cross ... ..	...	...	...	3	52	...	...	1	52	59
Heage ... ..	...	...	...	...	...	39	27	2	2	1
Heanor ... ..	...	34	144	11	1	...	3	40	3	1
Ilkeston (Boro')	...	100	15	3	...	...	...	34	4	1
Long Eaton ...	14	1	43	12	...	...	...	2	1	1
Matlocks ... ..	1	...	...	...	...	...	1	...	...	...
North Darley ...	...	...	...	...	...	...	...	...	2	.
Ripley ... ..	...	...	5	1	1	9	119	15	6	...
Swadlincote ...	...	...	8	135	...	10	7	...	...	...
Wirksworth ...	...	...	...	...	...	1	...	1	...	...
<i>Rural Districts.</i>										
Bakewell ... ..	1	...	...	...	...	...	...	...	...	...
Basford ... ..	1	2	...	...	...	...	...	...	...	...
Belper ... ..	...	49	...	...	...	8	46	18	40	...
Blackwell ... ..	1	8	77	154	77	47	17	101	130	3
Chesterfield ...	...	...	...	216	91	5	9	101	133	7
Clown ... ..	...	15	86	4	1	...	3	...	...	...
Hartshorne & Seals	...	...	1	2	...	...	...	...	...	...
Repton ... ..	...	...	...	5	2	1	1	...	...	...
Shardlow ... ..	3	3	22	22	11	10	6	34	5	1
TOTALS ...	21	228	476	1123	339	224	474	609	696	131

TABLE XLII.

**Smallpox and Vaccination as returned by Local Medical Officers  
of Health.**

	<i>No. of Cases Notified.</i>	<i>Number</i>		
		<i>Vaccinated and Re- vaccinated.</i>	<i>Vaccinated in Infancy.</i>	<i>Unvac- cinated.</i>
<i>Urban Districts</i>				
Alfreton ... ..	—	—	—	—
Alvaston and Boulton ...	—	—	—	—
Ashbourne ... ..	—	—	—	—
Bakewell ... ..	—	—	—	—
Baslow ... ..	—	—	—	—
Belper ... ..	—	—	—	—
Bolsover ... ..	4	—	—	4
Bonsall ... ..	—	—	—	—
Brampton & Walton ...	—	—	—	—
Buxton (Boro') ... ..	—	—	—	—
Chesterfield (Boro') ...	10	—	1	9
Clay Cross ... ..	57	—	13	44
Dronfield ... ..	—	—	—	—
Glossop (Boro') ... ..	—	—	—	—
Heage ... ..	1	—	—	1
Heanor ... ..	1	—	—	1
Ilkeston (Boro') ... ..	1	—	—	1
Long Eaton ... ..	1	—	1	—
Matlocks ... ..	—	—	—	—
New Mills ... ..	—	—	—	—
North Darley ... ..	—	—	—	—
Ripley ... ..	—	—	—	—
South Darley ... ..	—	—	—	—
Swadlincote ... ..	—	—	—	—
Wirksworth ... ..	—	—	—	—
	75	—	15	60
<i>Rural Districts.</i>				
Ashbourne ... ..	—	—	—	—
Bakewell ... ..	—	—	—	—
Basford ... ..	—	—	—	—
Belper ... ..	—	—	—	—
Blackwell ... ..	2	—	—	2
Chapel-en-le-Frith ... ..	—	—	—	—
Chesterfield ... ..	7	—	4	3
Clowne ... ..	—	—	—	—
Glossop Dale ... ..	—	—	—	—
Hartshorne & Seals ...	—	—	—	—
Hayfield ... ..	—	—	—	—
Norton ... ..	—	—	—	—
Repton ... ..	—	—	—	—
Shardlow ... ..	1	—	—	1
Sudbury ... ..	—	—	—	—
<i>Rural Districts</i>	10	—	4	6
<i>Urban Districts</i>	75	—	15	60
<i>Whole County</i>	85	—	19	66

**Diphtheria.**—The number of cases of diphtheria notified during 1930 was 1,011, compared with 649 in 1929, while the number of deaths was 60, as against 45 in the previous year. The case mortality in 1930 was 5·93, compared with 6·92 in 1929.

The numbers of specimens received at the County Laboratory for examination for the diphtheria bacillus during the past seven years are as follows :—

1924	...	4,031
1925	...	5,802
1926	...	5,102
1927	...	4,154
1928	...	3,976
1929	...	4,695
1930	...	8,407

**Scarlet Fever.**—During the year, 2,207 cases of this disease were notified, of which seven proved fatal, compared with 1,825 cases and nine deaths in 1929. The figures for 1930 give a case mortality of ·41, compared with ·49 in the previous year.

**Whooping Cough.** 32 deaths occurred from this disease during 1930, as compared with 56 in 1929. The figures for 1930 give a death rate of ·05 per thousand of the population.

**Measles.** The total number of deaths from Measles during 1930 was 56, compared with 20 in 1929.

**Polio-Myelitis.** During the year, eight cases of this disease were notified. None of these was investigated by the Orthopædic Surgeon.

TABLE XLIII.—**Cancer.**

*Death Rate per annum in England and Wales and Derbyshire,  
and number of Deaths in Derbyshire, since 1901.*

Year.	Death Rates.		No. of	
	England and Wales.	Derbyshire.	Deaths in Derbyshire.	
1901-1910 ...	0·89 ...	0·667 ...	346 average	
1911 ...	0·99 ...	0·730 ...	410	
1912 ...	1·10 ...	0·728 ...	414	
1913 ...	0·98 ...	0·822 ...	472	
1914 ...	0·98 ...	0·872 ...	507	
1915 ...	0·96 ...	0·830 ...	460	
1916 ...	0·98 ...	0·951 ...	513	
1917 ...	0·99 ...	0·929 ...	489	
1918 ...	0·99 ...	1·022 ...	532	
1919 ...	1·17 ...	0·871 ...	481	
1920 ...	1·16 ...	0·988 ...	559	
1921 ...	1·21 ...	0·990 ...	586	
1922 ...	1·22 ...	0·980 ...	585	
1923 ...	1·26 ...	1·010 ...	606	
1924 ...	1·29 ...	0·990 ...	605	
1925 ...	1·33 ...	0·987 ...	604	
1926 ...	1·36 ...	1·153 ...	710	
1927 ...	1·37 ...	1·246 ...	774	
1928 ...	1·42 ...	1·190 ...	743	
1929 ...	1·43 ...	1·148 ...	717	
1930 ...	... ...	1·155 ...	721	

TABLE XLIV.

*Table shewing incidence of deaths from Cancer among Males and  
Females at varying ages.*

Year.	AGES.										Grand Total.
	Under 25		25—45		45—65		65 and over.		Totals.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1916	6	5	21	38	101	143	96	103	224	289	513
1917	3	5	10	35	102	143	90	101	205	284	489
1918	3	6	13	38	112	153	98	109	226	306	532
1919	5	5	12	37	101	129	85	107	203	278	481
1920	5	2	21	36	114	149	120	112	260	299	559
1921	4	1	24	32	103	152	130	140	261	325	586
1922	3	5	19	34	122	178	105	119	249	336	585
1923	3	3	11	36	126	177	121	129	261	345	606
1924	3	4	15	32	126	149	141	135	285	320	605
1925	2	5	16	29	132	146	139	135	289	315	604
1926	5	5	12	40	148	182	152	166	317	393	710
1927	5	3	23	41	166	209	156	171	350	424	774
1928	2	6	20	38	150	187	177	161	349	394	743
1929	6	1	22	24	147	157	167	193	342	375	717
1930	5	4	12	27	157	169	179	168	353	368	721



**Enteric Fever.** 26 cases of this disease occurred during the year, and there were five deaths, giving a case mortality of 19·23, compared with 23·07, the case mortality for the previous year.

TABLE XLV.—Enteric or Typhoid Fever.

Year.	Cases.	Case Mortality per cent.	Death Rate per 1,000 pop.	Case rate per 1,000 of population.
1900	678	14·8	·203	1·36
1901	495	15·5	·16	·98
1902	262	17·5	·09	·52
1903	340	10·5	·07	·67
1904	352	15·0	·11	·68
1905	263	17·11	·09	·50
1906	333	15·0	·09	·62
1907	194	18·56	·07	·35
1908	238	15·55	·07	·43
1909	157	15·27	·05	·27
1910	143	12·59	·03	·25
1911	189	15·34	·05	·33
1912	116	21·55	·04	·20
1913	120	20·83	·04	·21
1914	59	13·56	·01	·10
1915	88	22·7	·03	·16
1916	74	22·98	·03	·13
1917	52	19·24	·02	·09
1918	58	25·86	·02	·11
1919	123	12·20	·02	·22
1920	58	13·79	·01	·10
1921	63	12·70	·01	·10
1922	25	8·0	·003	·04
1923	42	16·66	·01	·07
1924	52	7·69	·01	·08
1925	37	8·10	·005	·06
1926	26	15·39	·006	·04
1927	47	12·76	·009	·07
1928	23	17·39	·01	·04
1929	26	23·07	·01	·04
1930	26	19·23	·008	·04

**Encephalitis Lethargica.** The following Table gives the number of cases of Encephalitis Lethargica notified in the County during the years 1921—1930 :—

TABLE XLVI.

Districts.	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
<b>URBAN.</b>										
Alfreton ...	1	...	...	1	1	...	...	...	...	...
Bakewell ...	...	1	...	1	...	1	...	...	...	1
Belper ...	3	...	2	...	...	...	...	1	...	...
Bolsover ...	...	...	...	...	1	1	...	...	...	...
Bonsall ...	...	1	...	...	...	...	...	...	...	...
Brampton & Walton	...	...	...	1	...	...	...	...	...	...
Buxton Boro'	...	1	...	2	1	1	...	1	...	...
Chesterfield Boro'	2	...	1	8	11	5	4	6	4	2
Clay Cross ...	...	...	...	2	2	...	...	...	2	...
Dronfield ...	...	...	...	4	1	...	...	...	...	...
Glossop Boro'	...	1	2	2	...	...	1	3	...	...
Heage ...	1	...	...	1	...	...	1	...	...	...
Heanor ...	1	1	...	1	...	...	1	1	1	...
Ilkeston Boro'	...	...	...	1	1	...	...	2	...	...
Long Eaton	...	1	...	2	1	1	...	...	1	...
Matlocks ...	1	...	...	...	...	...	...	...	...	...
New Mills ...	...	...	...	4	4	2	1	3	2	2
Ripley ...	...	...	...	2	1	1	...	...	...	...
Swadlincote	...	...	1	...	...	...	2	...	...	...
Wirksworth ...	...	...	...	...	...	...	...	...	...	1
<b>RURAL.</b>										
Bakewell ...	1	...	...	3	1	...	...	...	...	...
Belper ...	...	1	...	6	1	...	...	...	...	...
Blackwell ...	1	...	...	6	5	...	3	1	1	1
Chapel-en-le-Frith	...	...	...	2	1	2	...	...	...	...
Chesterfield	1	1	...	17	9	1	...	1	...	2
Clown ...	...	...	...	2	...	4	1	1	...	...
Hartshorne & Seals	...	...	...	...	1	...	...	...	...	...
Hayfield ...	1	...	...	3	...	...	...	...	...	...
Norton ...	...	...	...	4	...	...	...	...	...	1
Repton ...	...	...	...	4	...	...	1	1	...	...
Shardlow ...	1	1	...	4	1	...	...	...	2	...
Sudbury ...	...	...	...	1	...	...	...	...	...	...
<b>Totals</b>	<b>14</b>	<b>9</b>	<b>6</b>	<b>84</b>	<b>43</b>	<b>19</b>	<b>15</b>	<b>21</b>	<b>13</b>	<b>10</b>

## TUBERCULOSIS.

### GENERAL REMARKS.

Dr. David Stewart, the President of the Canadian Tuberculosis Association, spoke as follows in his address for 1930 :—

“ Twenty or twenty-five years ago the bull's eye of our target was the young person who came to his doctor with just an occasional cough, or very slight fever. . . . We sat and waited for this particular species of fly to walk into our parlour. . . . The bull's eye of our target to-day is the child who is infected and doesn't know it . . . . Ultimately we should aim at the whole community, but in the meantime we can get most out of our limited ammuni-

tion by aiming at the narrower mark of known contacts and known suspects. The best eyes and ears so far devised for the submerged nine-tenths of tuberculosis is the X-ray plate. The Lænnec of the twentieth century is Roentgen . . . Community safety demands the treatment of tuberculosis people as early, as late, and as long as treatment is necessary. It demands the segregation or effective supervision of spreaders as soon and as long as they are spreaders. The very foundation of the prevention of Tuberculosis is beds."

No better appreciation of the situation, no better statement of policy has yet appeared. But it is, perhaps, desirable to say a few words about that obsolete target of twenty-five years ago—the so-called "early case," before developing the implications of Dr. Stewart's policy. Despite the fact that an early hæmoptysis or so-called "idiopathic" pleural effusion still occasionally enables us to "beat the pistol" in the race against the tubercle bacillus, we now know that our ideal "early case" was, to a great extent, a metaphysical conception, and, like many other such, failed to conform to observed fact. It was really a sort of extrapolation from the data of our cases as we actually saw them. We drew the inference that if a case was Stage Turban II. when we first saw it, it must have been Stage Turban I. some time before. We now realise that such an inference was unwarranted, that the development of active pulmonary tuberculosis from the initial infection does not follow what mathematicians call the "law of exponential growth," and is not a sum in compound interest. There is nothing of the "inevitability of gradualness" about it, and the actual denouement, as it occurs, for example, in a Titian-haired girl, aged seventeen, may rather resemble a chemical reaction touched off by a catalyst, and be sudden, explosive, and catastrophic.

With infinite pains and infinite patience, men like Ranke, Ghon, and Redeker in Germany, Calmette and Kuss in France, Opie, McPhedran and Gardner in the United States, Erb and Parsons in Canada have traced out the development of the full-blown disease from the initial "chancre" of infection, and demonstrated that all the stages up to that of established clinical disease may occur without any observable disturbance of health, without symptoms, or physical signs discoverable by palpation, percussion or auscultation. But they have also shown that the presence of infection can be detected by the intra-dermal use of tuberculin prepared from cultures so grown as to exclude all possibility of false reaction; and that the actual primary lesion can be localised and followed through its stages of development by efficient Roentgenography, and by no other means. They have further shown us that while about 60 per cent. of family contacts to open cases are infected before the age of 15 years, in only about 8 per cent. does the infection go on to established clinical disease. Here is, perhaps, the explanation of the divergence of the views of Sir William Osler and Sir James Kingston Fowler. The former, perhaps, referred to infection, the latter to clinical disease.

We have to thank our own clinicians, men like Burrell, Chandler, Young, Burton Wood, Jessel and the "Lancashire School" for demonstrating that when symptoms are obvious, and physical signs are demonstrable by the stethoscope and the percussing finger, the case is either no longer an "early" one, or is not one of tuberculosis at all. Hence the overwhelming importance of thorough bacteriological examinations of sputum and fæces. As Brompton and Victoria Park have pointed out again and again, chest disease, with obvious physical signs, associated with copious purulent sputum free from the tubercle bacillus, is not tuberculous in nature.

The general acceptance of the foregoing conclusions marks the passage of another milestone on the long and winding road of scientific knowledge. Inevitably, the usual regrets are heard from the "*laudatores temporis actæ*," the die-hards and reactionaries of the medical profession, that the art of medicine is being mechanised, and therefore degraded, respect for authority is being undermined. Lænnec, according to them, said the last word in the diagnosis of diseases of the chest. His teaching, like that of Aristotle, stands for all time, one had almost written—eternity. Times change, and we change in them, or suffer the consequences. Stasis is death; but, like the characters in the drama, "*Outward Bound*," we may be dead, and not know it, fondly believing that we are still living forces. That is the tragedy of the closed mind.

Modern anti-tuberculosis policy, according to Dr. Stewart, resolves itself, therefore, into (1) The examination and supervision of known contacts, and suspects; (2) the employment of X-rays; (3) The segregation or supervision of "spreaders" as soon and as long as they are spreaders; (4) Beds—"the very foundation of the prevention of tuberculosis is beds." Let us begin with the foundation.

The Ministry of Health publish every year statistical analysis of the work done under the schemes of local authorities for the treatment of tuberculosis. For the purpose of comparison, the figures for Derbyshire for 1927, 1928 and 1929 are given, together with those of all Counties and all areas in England for 1929, in Table TI. Amongst the statistics given are the average number of beds available for each County Council, County Borough Council, Joint Committees and the Welsh National Memorial Association, per 100 deaths from tuberculosis. These figures include beds available for non-pulmonary cases. This Table shows that Derbyshire possesses 47 beds for every 100 deaths, in comparison with 59 beds for English Counties as a whole, which in round figures means that at the time the Memorandum was published we required an additional 50 beds to bring us up to the average of the English Counties. Recently, however, 32 more beds have been made available by the opening of a pavilion for adult cases of non-pulmonary tuberculosis at Bretby Hall, so that 18 beds are required merely to bring us up to the average; but considerably more than this is desirable.



The number of beds available for surgical tuberculosis is now ample, but there is a shortage of beds for pulmonary cases. This shortage is reflected, not in the waiting lists, for waiting lists can be shortened by reducing the length of stay of the patients in institutions, but in the brevity of the average period of treatment of our pulmonary patients in the institutions available.

The following Table shows the average length of stay in each of these institutions for the last six years :—

		<i>Walton Sanatorium.</i>	<i>Penmore.</i>	<i>Bretby Hall.</i>
1925	...	123 days.	—	—
1926	...	120 „	—	—
1927	...	135 „	91.2 days.	174 days.
1928	...	140 „	115.6 „	419 „
1929	...	123 „	124.7 „	681 „
1930	...	144 „	133.9 „	633 „

At the present moment, of the 124 beds at the Sanatorium, only 100 are used for the early sanatorium type of case, the others are being taken up for the accommodation of advanced cases. The 24 beds at the Sanatorium, the 14 at Penmore and the six at Whitworth Hospital, making a total of 44 beds for hospital cases, is inadequate. We require the whole of the 124 beds at the Sanatorium for "sanatorium" cases—that is their proper function. The present system means in practice that "sanatorium beds" are occupied by "hospital" cases. It is now fully realised that, as a preventive measure, the "hospital bed" is more valuable than the "sanatorium bed," as the former segregates and removes from the home the source of massive infection. While it is desirable to concentrate all "sanatorium" cases in one central institution, there are weighty reasons for providing for "hospital" cases in small local units where they would be within easy reach of their relatives.

In my report for the last two years I have stated and reiterated the need for more beds for the "hospital" type of case, so situated as to be reasonably accessible to the homes of relatives. Prior to the passing of the Local Government Act of 1929, I had tried, but without much success, to meet the requirements by arranging for beds at existing institutions throughout the County, realising that the economic position is such that I could not confidently anticipate considerable capital expenditure in the building of at least three small hospitals for the advanced type of case. The Local Government Act, however, presented an opportunity for re-organising the isolation hospital service, and one hoped that in this re-organisation advantage would have been taken of modern transport facilities, and that, consequently, isolation hospitals would be large institutions serving large areas. This in turn would entail the closing of the majority of the small isolation hospitals at present scattered about the County, which, for reasons stated in my reports dealing with isolation hospitals, are now unsuited for their original

purpose. They are comparatively modern buildings, however, and with a minimum of adaptation would provide accommodation for " observation " and " hospital " cases of tuberculosis, and could be equipped with modern X-ray apparatus, which is essential for recognition and location of tuberculous lesions, as stated later on in this report, where the subject of examination of contacts is discussed.

I had hoped that at least three of the hospitals would have been available for these purposes, one in the area of each Tuberculosis Officer, viz., one in the North-West, one in the North-East, and one in the South. In this way the necessary additional beds for advanced and observation cases could have been provided in situations accessible to relatives, and at the same time freeing the Sanatorium from the type of case which should not be there. These extensions of the tuberculosis service could have been initiated in the manner indicated at very small cost.

The need for beds for " hospital " cases remains to be met.

TABLE T. I.

INSTITUTIONAL TREATMENT STATISTICS.

PULMONARY.		Derbyshire.			All Counties 1929.	All Areas in England 1929.
		1927.	1928.	1929.		
Average number of beds available per 100 Tub. deaths ...		45	45	47	59	60
Total No. of patients excluding observation cases, per 100 Tub. deaths ...		87	89	88	106	119
Percent. of cases treated who were pulmonary cases ...		82.5	87.5	90.5	82.4	84.7
Percent. of pulmonary cases who stayed.	Under 3 months...	41.3	39.0	46.6	34.3	42.9
	3 to 6 months ...	44.5	39.6	37.0	35.7	33.2
	Over 6 months ...	14.2	21.4	16.4	30.0	23.9
Percent. of Pulmonary cases who were adults ...		87.7	80.6	87.3	88.0	86.7
Percent of adult Pulmonary cases who stayed over 3 months ...		54.7	56.5	49.2	63.7	57.1
Percent. of Pulmonary cases who were classed on admission as	Class T.B. Minus	24.9	31.4	24.3	39.1	38.3
	Class T.B. + I.	7.3	5.4	3.4	11.4	8.9
	Class T. B. + II.	34.7	31.6	32.2	30.7	32.4
	Class T.B. + III.	33.1	31.6	40.1	18.8	20.4
Percent. of those in each category who stayed over six months	Class T.B. Minus	20.2	12.7	10.5	28.6	20.4
	Class T.B. + I.	8.7	15.8	16.7	31.5	25.9
	Class T. B. + II.	10.9	24.3	16.7	32.0	27.9
	Class T.B. + III.	14.3	27.9	19.7	29.0	23.1
NON-PULMONARY.						
Percent. of non-pulmonary cases who were children ...		77.6	60.0	46.0	57.1	59.9
Percent. of non-pulmonary cases classified on admission as	Bones and Joints	73.1	74.0	81.1	54.4	50.0
	Abdominal ...	9.0	8.0	8.1	17.4	16.7
	Peripheral Glands	6.0	6.0	5.4	21.0	23.2
Percent. of Bone and Joint cases who stayed over 12 months ...		18.4	40.5	40.0	30.7	32.5
Percent. of abdominal cases who stayed over 6 months ...		16.7	50.0	66.7	34.5	28.7
Percent. of glands who stayed over 3 months ...		50.0	100.0	—	49.9	48.3

## EXAMINATION OF CONTACTS.

In my Report for 1928 I dealt at some length with this subject, pointing out, amongst other things, that the examination of contacts is a matter which deserves considerable attention, and that the prevention of the spread of tuberculosis is largely centred in the homes of the patients. It was with a view to developing this side of the service that an additional Tuberculosis Officer was appointed at the end of 1928.

There are now definitely two schools of thought as to the practical technique of contact examination and treatment—(1) The Lancashire School and (2) The American School. Some would add a third, the Paris or “Grancher” school, which is, briefly, the boarding out of children from infected households; but there is really little essential difference between Parisian and American ideas in this matter.

The principles of the Lancashire School, as described by Dr. Lissant Cox, may be summarised as follows:—

- 1 The most profitable contact work is to be done amongst the families of patients whose sputum has contained tubercle bacilli. It is generally a waste of time to trouble about the contacts of negative or non-pulmonary cases, except from the point of view of seeking the primary source of infection in these.

2. Even as regards the tuberculous positive sputum cases, it will be found most profitable, as a rule, to limit one's energies to contacts on whom, for some reason or other, suspicion rests. (Suspects).

3. Close contacts of patients whose sputum has contained tubercle bacilli should, if possible, be kept under observation and re-examined at intervals for at least four years.

The American school adopts the principle of the first paragraph whole-heartedly, but disagrees with the second. It maintains that contacts who develop tuberculosis are infected during childhood, but, as a rule, do not show clinical signs of disease until the period 15 to 25 years of age, when the disease may suddenly manifest itself in an acute form; that the individuals who develop disease at this period of life are not those who were “suspects” during childhood, but are mainly from amongst those who appeared to enjoy good health, and that, consequently, the four years' period of observation of “suspects” is, so to speak, “neither here nor there.” It further maintains that from the very first not only can the fact of infection, or “allergy,” be demonstrated by the use of a suitably safe-guarded tuberculin test, but that the actual “chancre” of infection can be located and its further development studied and watched by skilled chest Roentgenography, and by no other means. Little reliance can be placed upon symptoms, still less upon stethoscopic or other physical signs, in childhood. This is a long way from the “march past” of the contacts advocated years ago by Sir Robert Philip.



The prevention of the development of tuberculosis amongst "contacts," therefore, according to American ideas involves—

- (a) The compulsory segregation of "Spreaders" from their families, either in their homes or institutions.
- (b) The tuberculin testing of all young contacts (up to the age of 15 years) and the X-ray examination, and prophylactic treatment of all positive reactors.

As regards (a), the cleavage of opinion is fundamental. It goes right down to the very basis of the difference in mental make-up, that separates the Englishman from the American. Logically, the American position is impregnable, provided—

- (1) That the facts are correct.
- (2) That human nature is capable of carrying out the preventive measures which follow logically from these facts.

As regards (1), the Englishman, while still sceptical, is prepared to admit that, as far as our knowledge goes at present, the Americans are correct in their facts.

Regarding (2), however, to our mind the Englishman has no doubt whatever that such measures will not work in practice, and he will not attempt to force measures, however "logical," upon his fellow men, which he believes ask more of human nature than human nature is capable of giving.

British social and public health legislation, up to the present, has been designed to cause the minimum of interference with human liberty, and it is as a general rule obeyed without question. Much American social legislation is drastic, and is, in practice, fairly systematically evaded. Its evasion is not unaccompanied by corruption. Permanent compulsory segregation of infective cases of tuberculosis, in the Englishman's opinion, is not practical politics; but voluntary isolation should be encouraged by every means in our power.

Voluntary tuberculin testing and the radiographic supervision of "reactors" is on a different footing. Here the main obstacle is the cost. Tuberculin testing means the employment for the intra-dermal (or possibly the per-cutaneous) test, of tuberculin prepared from cultures grown on "synthetic" media. The Von Pirquet test cannot be relied upon. But the intra-dermal test is just as reliable in human beings as it is in cattle, where nobody questions its accuracy. It should, of course, be followed, in the case of reactors, by radiography.

Efficient chest radiography means expensive plant frequently needing bringing up to date, skilled technicians and much expenditure of time. It is, however, essential for the early recognition, location and delimitation of tuberculous lesions.

In the Derbyshire County Council area there are, at present, five X-ray installations in use, viz., Bretby Hall Orthopædic Hospital, Walton Sanatorium, and one at each of the Tuberculosis Dispensaries at Derby, Chesterfield, and Chinley. Of these, the only installations capable of doing the chest work mentioned above is that at Bretby and, within limitations, that at Chinley Dispensary. Those at Walton, Chesterfield, and Derby are pre-war coil installations, difficult to manipulate and unreliable in their results.

The present state of public opinion is hardly likely to tolerate the official interference necessary for the tuberculin testing of all contacts to infectious cases of tuberculosis. It would appear, therefore, that we must be content with the adoption of the "Lancashire System" of contact examination. But it must be understood that in doubtful cases the use of Roentgenography is essential, and that our supervision should be extended so as to include all contacts while going through the dangerous decade between the ages of 15 and 25 years, in the hope that if disease should manifest itself during that period it may be caught "early," even though we know that, in many cases, that "early" will be too late.

I should here like to acknowledge the valuable assistance I have received from Dr. P. Heffernan, one of the Council's Tuberculosis Officers, in the preparation of this portion of the Report.

### TUBERCULOSIS SCHEME.

The County Council's Scheme was explained at some length in the Survey Report of 1925, and, as I explained in that Report, the scheme consists of two main units, viz., Dispensary and Institutional.

#### **Dispensary Unit.**

This unit consists of nine Dispensaries and the areas served by them cover the whole administrative county. Details of the situation, times of opening, etc., are given on page 79.

The undermentioned changes have taken place in this service during the year:—

**CHINLEY DISPENSARY.** The X-ray apparatus in use at Bretby Hall Orthopædic Hospital was transferred to this Dispensary and a new and more powerful apparatus installed there. The need for an X-ray apparatus in the north-western area of the County has been felt for a considerable time, but, as electricity was not available, it had not been possible to instal one in a suitable situation. However, during the year the Trent Valley and High Peak Electricity Co. extended their service to Chinley, and the Dispensary there being suitably situated for serving the north-western area, the X-ray apparatus was installed there.



TABLE T. II.

## REPORT SHOWING THE WORK OF THE TUBERCULOSIS DISPENSARIES during the Year 1930.

DISPENSARIES.	ASH- BOURNE.	BURTON.	CHESTER- FIELD.	CHINLEY.	DERBY.	GLOSSOP.	ILKESTON	LONG EATON.	MATLOCK.	WHOLE COUNTY	AVERAGE 1925-1929
A. Estimated Population, 1929 ...	15,015	35,525	270,705	46,315	101,350	25,890	65,790	30,285	33,425	624,300	619,040
Notifications 1930—											
Pulmonary ... ..	8	39	193	39	70	18	41	41	19	468	563
Non-Pulmonary ... ..	9	18	104	25	31	9	19	10	16	241	265
Total ... ..	17	57	297	64	101	27	60	51	35	709	828
B. NEW CASES— (Total) ...	25	117	438	88	150	62	139	73	92	1184	1,204
(a) Definitely Tuberculous											
i. Pulmonary ... ..	7	20	156	27	53	12	28	27	14	344	393
ii. Non-Pulmonary ... ..	6	13	59	14	17	7	14	8	14	152	134
(b) Doubtfully Tuberculous ... ..	1	5	9	7	11	3	9	2	9	56	127
(c) Non-Tuberculous ... ..	11	79	214	40	69	40	88	36	55	632	550
C. CONTACTS— (Total) ...	24	130	684	78	446	25	217	91	67	1762	803
(a) Definitely Tuberculous :											
i. Pulmonary ... ..	...	1	1	4	2	1	1	2	1	13	23
ii. Non-Pulmonary ... ..	...	...	...	2	3	...	...	1	...	6	11
(b) Doubtfully Tuberculous ... ..	...	2	29	10	21	...	24	9	6	101	61
(c) Non-Tuberculous ... ..	24	127	654	62	420	24	192	79	60	1642	709
D. CASES WRITTEN OFF DISPENSARY REGISTER. (Total) ...	53	213	1096	118	557	82	306	126	149	2700	1,621
(a) Cured.											
i. Pulmonary ... ..	9	3	124	...	26	4	10	4	8	188	148
ii. Non-Pulmonary ... ..	6	3	57	...	7	9	6	...	8	96	50
(b) Diagnosis not confirmed or Non-Tuberculous ... ..	38	207	915	118	524	69	290	122	133	2416	1,425
E. NUMBER ON REGISTERS ON DECEMBER 31st, 1930 (Total) ...	97	167	727	321	329	171	254	141	244	2451	2,467
(a) Diagnosis completed.											
i. Pulmonary ... ..	79	115	504	202	261	122	150	103	163	1699	1,842
ii. Non-Pulmonary ... ..	18	47	218	107	59	46	80	32	78	685	528
(b) Diagnosis not completed ... ..	...	5	5	12	9	3	24	6	3	67	97
1. Number on Register Jan. 1st, 1930	104	143	848	302	344	180	240	123	255	2539	2,387
2. No. of transferred and "lost-sight-of" Cases returned ... ..	3	5	30	6	8	...	5	5	2	64	35
3. No. transferred, and lost sight of ...	4	3	56	16	28	5	13	6	11	142	138
4. No. died during year ... ..	2	12	121	19	34	9	28	19	12	256	211
5. Cases under observation for more than 2 months ... ..	...	5	5	8	3	...	12	4	4	41	108
6. Total Attendances ... ..	142	393	2095	401	825	464	1042	487	502	6351	7,177
7. Attendances at Orthopaedic Clinics	...	...	...	...	...	...	...	...	...	569	401
8. Consultations with Medical Prac- titioners :—											
(a) At homes ... ..	5	24	76	32	40	12	22	15	16	242	142
(b) Otherwise ... ..	12	117	398	48	115	41	156	58	55	1000	772
9. Other visits by T.O.'s to Patients' Homes. ... ..	13	215	650	63	418	40	316	86	48	1849	825
10. Number of :—											
(a) Sputum, etc., Examinations	33	165	152	104	210	83	226	115	107	1195	938
(b) X-ray Examinations ... ..	39	48	375	55	124	14	54	62	54	825	781
11. Insured Persons on Register on Dec. 31st, 1930 ... ..	34	71	323	118	125	95	102	70	107	1045	1,088
12. Insured Persons under Domiciliary Treatment Dec. 31st, 1930 ... ..	11	4	7	20	16	23	10	5	10	106	242
13. Reports received in respect of Insured Persons :—											
(a) Form G.P. 17 ... ..	2*	26*	198*	29*	61*	19*	57*	38*	44*	474*	99*
(b) Form G.P. 36 ... ..	28	10	15	30	38	17	20	14	30	202	207

\*Including Letters from Medical Practitioners.



**DERBY DISPENSARY.** In July, 1930, the Tuberculosis Dispensary situated at the back of the New County Offices was taken over by the County Surveyor's Department as additional office accommodation. The Dispensary was transferred to one room on the second floor of the New Offices, and an assurance was given that the arrangement was only a temporary expedient. This room is unsuitable for use as a tuberculosis dispensary on account of its inaccessibility (there being a long flight of steps to negotiate in order to reach it), the noise from the street, and inadequate lavatory and waiting room accommodation.

**MATLOCK DISPENSARY.** At the end of 1929, notice was received to quit the premises in Snitterton Road, Matlock, which were used as a dispensary. Early in 1930, the County Council purchased Dean Hill House, Causeway Lane, Matlock, for use as a combined Tuberculosis, School Medical, and Maternity and Child Welfare Clinic. Occupation of the premises commenced on March 1st, 1930. Particulars of the property were given in my report for last year, p. 83.

Statistical details of the work done at or in connection with the dispensaries are given in Table TII. These statistics are compiled from the returns required by the Ministry of Health under Memorandum 37/T. From them it is possible to compare the work done during 1930 with the average year's work since 1925. It will be noticed that, compared with the average, there is a considerable decrease in the number of notifications, the number of new cases seen at the dispensaries remains about the same; but there is a considerable increase in the number of contacts examined, consultations with medical practitioners and other home visits by the Tuberculous Officers. Although the number of contacts examined has considerably increased, the number of definite cases found is less. The decrease is largely amongst children, and is due to a considerable extent to more accurate diagnosis. In this connection it is interesting to note also that the number of children up to 15 years of age notified as suffering from tuberculosis has declined during the last five years. The number notified in 1925 was 319, and the number notified in 1930 was 196.

The Ministry of Health, from the returns mentioned above, issue each year Memorandum 131/T, the latest being for 1929, giving comparative figures of the work done under the tuberculosis schemes of County and County Borough Authorities. In Table TIII. are the figures, extracted from the Ministry's memorandum, relating to the tuberculosis scheme in this County for the past three years, together with the average for 1929, of all English Counties and all areas in England.

From this Table it will be seen that the death-rate in this County is below the average. With the additional Tuberculosis Officer who took up duty in January, 1929, considerably more time has been available for the examination of contacts and home visiting. It will be noticed that more work has been done in these respects

in Derbyshire than is done on the average in other areas. I have pointed out how very important I consider these matters as a means of preventing spread of disease. With regard to home visits by Health Visitors, the figures for 1929 are not strictly comparable with the figures for 1927 and 1928, for the 1929 figure includes only visits to patients who are on the Dispensary Registers.

TABLE T. III.  
DISPENSARY STATISTICS.

	<i>Derbyshire.</i>			<i>All in County. England</i>	<i>All Areas in England</i>	
	1927.	1928.	1929.	1929.	1929.	
Death rate from all forms of tuberculosis per million of population ... ..	707	724	708	804	956	
Total number of new cases recorded during the year per 100 T.B. deaths ... ..	216	211	191	197	202	
Percentage of new cases of Tuberculosis who were notified on Form A. or B. ... ..	84.4	86.1	83.3	90.2	89.9	
Number of cases of Tuberculosis on Dispensary Register, 31st December, per 100 on notifications register ... ..	62	61	60	61	61	
Number of new cases examined by T.O's during the year per 100 deaths from Tuberculosis	254	263	257	267	269	
No. of contacts examined by T.O's during the year.	Per 100 tuberculosis deaths	158	166	343	122	128
	Percent. of contacts who were adults	32.4	32.7	32.8	39.6	41.4
Percent. of new cases and contacts whose diagnosis was completed within 3 months of first examination ... ..	95.9	97.7	98.2	96.1	96.0	
Number of consultations at homes or otherwise per 100 deaths from tuberculosis ...	195	196	268	307	304	
*Number of other home visits by T.O's per 100 Tuberculosis deaths ... ..	106	126	469	260	162	
†Number of home visits by H.V's per 100 patients on Dispensary Registers... ..	386	348	216†	328	359	
Number of insured persons on Domiciliary Treatment on 31st December per 100 insured persons on Dispensary Register	17	14	10	29	32	

\*—The figures given under this heading for individual Counties vary considerably—the highest figure is 3,760, and the lowest 6.

†—only includes visits to patients on Dispensary Registers during 1929.

## INSTITUTIONAL UNIT.

Below is given particulars of the Institutional accommodation provided by the County Council:—

<i>Institution.</i>			<i>Beds available.</i>
Derbyshire Sanatorium	...	124	(with six additional shelter beds for the summer time).
Penmore Pavilion	... ..	14	(with two additional shelter beds for the summer time).
Bretby Hall Orthopædic Hospital	... ..	*92	(including 32-bed block, opened July, 1930).
Whitworth Hospital	... ..	6	
Other Institutions (not belonging to the C. C.)	...	8	(average for year).
		<hr/> 244 <hr/>	

\* Seven beds are reserved for patients from other Authorities.

TABLE T. IV.

AVERAGE NUMBER OF BEDS AVAILABLE FOR PATIENTS DURING THE YEAR 1930.

	Observation.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total.
		"Sanatorium" Beds.	"Hospital" Beds.	Disease of Bones and Joints.	Other Conditions	
Adult Males ... ..	1	39	30	11	2	83
Adult Females ... ..	2	41	15	10	1	69
Children under 15 ...	3	17	—	58	2	80
TOTAL ... ..	6	97	45	79	5	232

RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT DURING THE YEAR 1930.

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions	In Institutions on Dec. 31.
Number of Patients	Adults.	M.	72	188	146	26	88
		F.	51	159	140	13	57
	Chil- dren.	M.	36	49	44	2	39
		F.	33	40	44	1	28
Number of Observation Cases ... ..	Adults	M.	5	12	15	—	2
		F.	3	10	12	—	1
	Chil- dren.	M.	—	6	6	—	—
		F.	2	5	4	—	3
	Total		202	469	411	42	218



TABLE T V.

Annual Return showing the immediate results of treatments of patients and of observation of doubtful cases discharged from Residential Institutions during the year 1930.

Observa- tion for purpose of diag- nosis	Classification on admission to the Institution	Condition at time of discharge.	Duration of Residential Treatment in the Inst.												T'tal
			Under 3 months			3—6 months			6—12 months			More than 12 months			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis	Class TB. minus	Quiescent ...	—	3	3	1	2	7	—	—	2	—	—	2	20
		Improved ...	10	12	6	6	6	14	2	1	4	2	—	1	64
		No material improve't	1	3	—	1	—	—	—	1	—	—	—	—	6
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class TB. plus Group 1	Quiescent ...	—	1	—	—	1	—	—	—	—	—	—	—	2
		Improved ...	1	1	—	3	1	1	2	—	—	1	—	—	10
		No material improve't	—	—	—	—	1	—	—	—	—	—	—	—	1
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class TB. plus Group 2	Quiescent ...	—	—	—	1	—	—	—	1	—	—	—	—	2
		Improved ...	13	17	1	25	17	1	9	10	1	2	—	—	96
		No material improve't	3	4	—	1	1	—	—	1	—	—	2	—	12
		Died in Institution	1	—	—	—	—	—	1	—	—	—	—	—	2
	Class TB. plus Group 3	Quiescent ...	—	—	—	—	—	—	—	—	—	—	1	—	1
		Improved ...	5	14	—	12	5	—	4	4	—	2	—	—	46
		No material improve't	16	4	—	12	10	—	3	4	—	1	—	—	50
		Died in Institution	14	9	—	3	2	1	3	1	—	2	1	—	36
Non-Pulmonary Tuberculosis	Bones and Joints	Quiescent or Arrested	—	5	2	4	1	7	1	1	1	—	1	23	46
		Improved ...	—	—	—	—	—	—	—	—	—	—	—	1	1
		No material improve't	—	1	1	—	—	—	—	—	1	—	—	1	4
		Died in Institution	2	—	—	—	—	—	—	—	—	—	—	1	3
	Abdom- inal	Quiescent or Arrested	—	—	1	—	—	1	—	—	—	—	—	—	2
		Improved ...	—	—	—	—	—	—	—	—	—	—	1	—	1
		No material improve't	—	—	—	—	—	1	—	—	—	—	—	—	1
		Died in Institution	—	—	1	—	—	—	—	—	—	—	—	—	1
	Other Organs	Quiescent or Arrested	1	—	—	—	—	3	—	—	1	—	—	—	5
		Improved ...	—	—	—	—	—	—	—	—	—	—	—	—	—
		No material improve't	1	—	—	—	—	—	—	—	—	—	—	—	1
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
	Periphe- ral Glands	Quiescent or Arrested	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved ...	—	2	—	—	—	1	—	—	—	—	—	—	3
		No material improve't	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
			Under 1 week			1—2 weeks			2—4 weeks			More than 4 weeks			
			—	—	1	—	—	—	—	—	—	—	—	—	
		Tuberculous ...	—	—	1	—	—	—	—	—	—	4	4	2	11
		Non-tuberculous ...	—	1	—	—	—	—	—	1	—	7	6	6	21
		Doubtful ...	1	—	—	—	—	1	1	—	—	2	—	—	5

Out-Patient Treatment—

197 Attendances for Artificial Pneumothorax Refills.

1 Attendance for Gas Replacement.

180 Attendances for Light Treatment.

3 Attendances for Surgical Appliances to be fitted.

## WALTON SANATORIUM.

The Medical Superintendent of Walton Sanatorium, Dr. A. Niven Robertson, reports on the work at this Institution during 1930, as follows :—

**Statistics.**

**318** patients admitted.

Males **162**. Females **111**. Children **45**.

**324** patients discharged.

Males **158**. Females **112**. Children **54**.

Average number of beds occupied—**122·3**.

Average length of stay of the patients—**144** days.

Average weight gained by the patients—**9lbs. 12ozs.**

**Patients Discharged.**

## MINISTRY OF HEALTH CLASSIFICATION.

TABLE D.S. 1.

	M.	F.	C.	TOTAL.
<b>PULMONARY</b>				
1. CLASS T.B. MINUS ... ..	23	27	39	89
2. CLASS T.B. PLUS ... ..				
Group I. ... ..	7	5	1	13
Group II. ... ..	54	53	3	110
Group III. ... ..	63	20	1	84
Totals ... ..	147	105	44	296
<b>NON-PULMONARY</b>				
Bones and Joints ... ..	...	...	1	1
Abdominal... ..	...	...	1	1
Other Organs ... ..	...	...	...	..
Peripheral Glands ... ..	...	...	1	1
Non-Tub. ... ..	7	7	6	20
Undiagnosed ... ..	4	...	1	5
Total ... ..	158	112	54	324

CLASSIFICATION OF SOCIETY OF SUPERINTENDENTS.

TABLE D.S. II.

		Without TB. in Sputum.			With TB. in Sputum			Hilus Cases.	Total
		M.	F.	C.	M.	F.	C.		
STAGE I.									
Grade	A.	13	16	6	8	5	...	...	48
„	B.	...	1	2	...	1	...	...	4
„	C.	...	1	...	...	...	...	...	1
STAGE II.									
Grade	A.	4	5	...	13	30	1	...	53
„	B.	1	2	...	1	10	...	...	14
„	C.	...	...	...	1	...	...	...	1
STAGE III.									
Grade	A.	3	1	...	28	14	1	...	47
„	B.	1	...	...	32	11	...	...	44
„	C.	...	...	...	43	12	...	...	55
HILUS CASES.									
Grade	A.	...	...	...	...	...	...	27	27
„	B.	...	...	...	...	...	...	2	2
„	C.	...	...	...	...	...	...	...	...
Total	...	22	26	8	126	83	2	29	296

TABLE DS. III.

**Occupations of Patients Discharged during Year.***(a)* MALES.

Miners ... ..	43	Lime drawer ... ..	1
Labourers ... ..	18	Quarry worker ... ..	1
Clerks .. ... ..	13	Stone dresser ... ..	1
Spinners & mill hands	5	Gate porter ... ..	1
Gardeners ... ..	5	Boiler stoker ... ..	1
Commercial travellers	4	Welder ... ..	1
Hosiery hands ... ..	3	Miller ... ..	1
Joiners ... ..	3	Analytical chemist ...	1
Grocers' assistants ...	3	Steward ... ..	1
Motor drivers ... ..	2	Butcher ... ..	1
Fitters ... ..	2	Coal merchant ... ..	1
Motor mechanics ... ..	2	Sanitary pipe worker ...	1
Farm hands ... ..	3	Sanitary pipe fireman ...	1
Platelayers ... ..	2	Warp knitter ... ..	1
Storekeepers ... ..	2	Telephonist ... ..	1
Painters ... ..	2	Publican ... ..	1
Lacemakers ... ..	2	Confectioner ... ..	1
Celanese workers ... ..	2	Body maker ... ..	1
Grinders ... ..	2	Upholsterer ... ..	1
Wood machinists ... ..	2	Shunter ... ..	1
Electrical engineer ...	1	Crane driver ... ..	1
Insurance agent ... ..	1	Hotel porter ... ..	1
Policeman ... ..	1	Warehouseman ... ..	1
Engine driver ... ..	1	Bus driver ... ..	1
Blacksmith ... ..	1	Machine tender ... ..	1
Fireman ... ..	1	Not stated ... ..	3
Ropemaker ... ..	1		
Roadmender ... ..	1		158
Moulder ... ..	1		
Stone builder ... ..	1		

*(b)* FEMALES.

Housewives ... ..	48	Students ... ..	2
Domestic servants ... ..	17	Tailoress ... ..	1
Shop assistants ... ..	7	Hotel assistant ... ..	1
Spinners ... ..	5	Driller ... ..	1
Hosiery hands ... ..	4	Bookbinder ... ..	1
Clerks .. ... ..	4	Teacher ... ..	1
Factory hands ... ..	5	Upholsterer ... ..	1
Weavers ... ..	3	Unemployed ... ..	5
Sick nurses ... ..	2		
Children's nurses ... ..	2	Total ... ..	112
Sewing machinists ... ..	2		



**General Results of Treatment.**

Quiescent ... ..	25
Improved ... ..	196
No Material Improvement ...	55
Died in Institution ... ..	23
Not or doubtfully Tuberculous ...	25
	—
	324
	—

**Ultra Violet Light Department.**

	<i>No. of Cases.</i>	<i>Cured.</i>	<i>Much Imp.</i>	<i>Imp.</i>	<i>I.S.Q.</i>	<i>W.</i>
Hilus Tubercle ...	17	—	8	9	—	—
Tub. Glands Neck ...	7	3	3	—	1	—
Tub. Peritonitis ...	5	1	2	1	—	1
Chronic Pleuritis ...	2	—	1	1	—	—
Chronic Pul. Tub. ...	1	—	1	—	—	—
Asthma ... ..	1	—	—	1	—	—
Acne ... ..	1	—	1	—	—	—
Tuberculides ... ..	1	1	—	—	—	—
Lupus ... ..	2	—	1	1	—	—
Concato's Disease ...	1	—	—	—	1	—
Bronchiectasis ...	2	—	1	1	—	—
Tuberculous Laryngitis	1	—	—	—	1	—
<b>Total ...</b>	<b>41</b>	<b>5</b>	<b>18</b>	<b>14</b>	<b>3</b>	<b>1</b>

A few cases confined to bed had treatment by the portable Tungsten arc lamp, but the results with it are not so good as with the quartz lamp.

A few cases also had treatment by the Murray Levick red-ray lamp.

The best results in ultra-violet light therapy are obtained in lupus, broken down tuberculous glands, tuberculides, and cases of hilus gland tubercle in children.

**Artificial Pneumothorax.** 16 new cases (10 males, six females), were commenced on this treatment, and 16 old cases (12 males, four females) were continued. There were 470 re-fill operations, seven gas replacements, and two depneumothorax operations performed in the year. There were 197 out-patient attendances for re-fills.

		<i>New cases started on A.P.</i>	<i>Old cases continued.</i>	<i>Refill operations.</i>	<i>Gas Replace- ments.</i>
1924	...	5	4	118	5
1925	...	6	9	81	6
1926	...	9	4	116	21
1927	...	11	6	262	12
1928	...	15	11	378	16
1929	...	10	19	520	2
1930	...	16	16	470	7

This form of treatment is being used in an increasing number of cases, at an earlier stage in the course of the disease, in bilateral cases, in the conversion of spontaneous pneumothorax cases into artificial pneumothorax, in pleural effusions, and in severe hæmoptysis. The results in many cases are extremely encouraging. I would cite the following two cases only as examples of others:—

Case F. E. Admitted from North Wingfield in April, 1924. The whole of his right lung was in an advanced stage of the disease. His sputum was T.B. ++ on three occasions in May and July, 1924. Artificial pneumothorax was started on 23rd June, 1924. He had 70 re-fills, and the treatment was finished on 19th Oct., 1927. He has kept in excellent health since then, and has had absolutely no sputum since August, 1924. For six months in 1930 he worked as painter on the Sanatorium staff. His sputum and fever disappeared two months after the A. P. was commenced.

Case A. E. W. Admitted on Sept. 5th, 1925. T.B. spontaneous pneumothorax right side, with effusion. T.B. + in the sputum on that date. Spontaneous pneumothorax was converted into artificial pneumothorax. Eight gas replacements were required before the pleura became dry. A. P. was maintained till March 15th, 1928. He has been T.B. negative since Dec., 1925, and has been working on the roads for nearly two years.

**Phrenic Evulsion.** This was performed in one patient. Although she seemed a case admirably suited for this form of treatment, the operation had no beneficial effect.

**Diagnosis Cases.** 36 cases were sent in for diagnosis. Of these, 20 were not suffering from pulmonary tuberculosis. No new infallible diagnostic test has been evolved. Both the Vernes Resorcin test and the blood sedimentation test are of some value in prognosis, but of limited use in diagnosis. The intradermal O.T. test gives severer local re-actions owing to the injection being made into the skin, but I still favour the subcutaneous test in diagnosis, if used with due caution.

**Lipiodol.** This substance, when injected into the bronchi, gives an opaque shadow by X-ray, and this reveals the form of the bronchial tubes; but that is all it does. Much was expected from it on its first introduction, and it was hoped that all manner of lung diseases would be revealed by it to the naked eye. As the result of experience, however, its field of usefulness has been found to be very restricted. Indeed, it is almost confined to cases of chronic bronchiectasis. In the great majority of these cases the diagnosis can be already made without Lipiodol, and Lipiodol simply confirms by a visual picture on the X-ray the dilated bronchial tubes, of which one already has a mental picture by other means of investigation. The shadow given by simple bronchiectasis and tuberculous bronchiectasis is the same, and remains merely a shadow. The diagnosis between the two still depends on the older method, sputum examination. Secondly, Lipiodol is used in cases of bronchial stenosis, from whatever cause. In both these conditions, however, Lipiodol as a rule merely confirms the diagnosis visually. It is regarded as harmful in cases of pulmonary tuberculosis. The field of Lipiodol is, therefore, not a wide one. I found it necessary to use it in only two cases last year, and in both the injection was made by the cricothyroid route. Both were cases of bronchiectasis.

**X-Ray Work.**—490 X-Ray photographs were taken in the year, and 484 screenings were done in artificial pneumothorax cases.

Lawrason Brown's hypermotility of the cæcum test after a Barium meal was used in a few cases of tuberculous intestine for diagnosis purposes.

**Laboratory Work.** 1,380 sputums and 314 urines were examined. 36 sedimentation tests, 32 Arneth counts, 10 differential blood counts, and three blood sugar tests were carried out in the year. No staining method for sputum examination has yet supplanted the old Ziehl-Neelsen method.

#### **Meteorological Data for 1930.**

Highest Wind ...	... Jan. 7th ...	... 31·89 miles per hour.
Highest Dry Kata ...	... Jan. 31st ...	... 49·0
Highest Wet Kata ...	... Mar. 20th ...	... 80·
Lowest Dry Kata ...	... Aug. 28th ...	... 1·5
Lowest Wet Kata ...	... Aug. 29th	... 15·2
Highest Outdoor Temp.	Aug. 28th	... 88° F.
Lowest Outdoor Temp.	Dec. 10th ...	... 28° F.
Highest Radiant Heat	July 5th ...	138·2° F.
Largest amount of		
Ultra violet Light	... May 27th ...	... 9·
Largest Rainfall	... July 20th ...	... 2·14"
Highest Max. Temp.	... Aug. 29th ...	... 89° F.
Lowest Min. Temp.	... Nov. 6th, Dec. 4th,	
	8th, 10th, 22° F.	

Day of Maximum hours

of sunshine ... June 8th ... 14.7 hours.

Total rainfall for year ... 35.28 inches.

January had the highest cooling power (Dry Kata average 27.1). September had the highest cooling power by evaporation (Wet Kata average 56.6). The highest average wind 11.14 miles per hour, and the greatest rainfall 5.07 inches were in January. December had the greatest Relative Humidity, averaging 87.9%; February, the highest barometric pressure, averaging 29.55"; August, the highest average temperature at 3 p.m., 65.5°F., and the highest Radiant Heat, 80°F.; June, the maximum ultra-violet light and the greatest amount of sunshine.

**General Remarks.** Treatment was on much the same lines as last year. Seventeen years ago, 70% of patients in Sanatoria had Tuberculin injections. Last year no patient had Tuberculin treatment in this Sanatorium. Methods change from year to year, and there are conflicting opinions always, but I think there is a consensus of opinion as to the value of artificial pneumothorax, and it is without doubt being used in a much greater number of cases in all Sanatoria which are at all progressive. Its effect in many cases is dramatic, and I feel sure that all tuberculosis physicians are glad that a statue is being erected in Rome to Dr. Forlanini, its great pioneer. There is no doubt that surgical treatment of pulmonary tuberculosis is being used more, and as the result of the appointment of Mr. Tonks\*, F.R.C.S., as our Honorary Surgeon, I hope to see an increase of the major surgical work at the Sanatorium in suitable cases.

Graduated labour is still used in all Sanatoria, and although there is a tendency to depreciate its value, or even by some illogical persons to regard it as harmful, there is no doubt that when used along with rest it is of great value in maintaining the metabolism of the patient and in improving his morale. If the Sanatorium is to be used for the permanent benefit of individual patients, longer stay is needed. If it is to be used for the education of patients, I think, in many cases, this can be done better in relation to his own environment at home.

Sanatorium treatment is of immense benefit to children with tuberculous ganglion-pulmonaire, and I welcome their admission, as they can usually be cured.

*\* It is with great regret that I have to report the death of Mr. Tonks, who died whilst this report was in the hands of the printer.*





TABLE D.S. V.

## DERBYSHIRE SANATORIUM.

## Comparative Statement of Cost.

	1927.		1928.		1929.		1930.		1931.	
	Year ending March 31st,		...		...		...		...	
Average daily number of Patients	118.4	...	124.0	...	120.3	...	121.1	...	122.1	...
do. Staff	35.8	...	37.0	...	37.9	...	37.9	...	37.9	...
	Cost per week per Patient.		Cost per week per Patient.		Cost per week per Patient.		Cost per week per Patient.		Cost per week per Patient.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Salaries and Wages	4,061	0 13 2	4,184	0 12 10½	4,351	0 13 10½	4,534	0 14 4½	4,860	0 15 3
Provisions	4,031	0 13 0½	4,155	0 12 9½	4,102	0 13 1	4,060	0 12 10½	4,095	0 12 10
Drugs and Medical Appliances	497	0 1 7½	496	0 1 6½	489	0 1 6½	419	0 1 4	475	0 1 6
Fuel, Light and Water	1,650	0 5 4	1,282	0 3 11½	1,133	0 3 7½	1,147	0 3 7½	1,127	0 3 7
Domestic and Laundry	653	0 2 1	647	0 2 0	673	0 2 2	636	0 2 0	799	0 2 6
Renewals and Repairs	273	0 0 10½	378	0 1 2	589	0 1 10½	593	0 1 10½	340	0 1 1
Miscellaneous	429	0 1 4½	494	0 1 6	556	0 1 9½	489	0 1 6½	512	0 1 7
Rates, Taxes and Insurance	711	0 2 3½	660	0 2 0½	668	0 2 1½	597	0 1 10½	580	0 1 10
Loan Repayment and Interest	991	0 3 2½	912	0 2 10	897	0 2 10	896	0 2 10	896	0 2 10
Capital Expenditure out of Revenue (garage)	—	—	—	—	14	½	—	—	—	—
Gross Totals	13,296	2 3 0	13,208	2 0 8½	13,472	2 2 11½	13,371	2 2 4	13,684	2 3 0
Deduct Profit on Farm Account	118	4	50	0 0 1½	102	0 0 3½	144	0 0 6	71	0 0 3
Deduct other Income	21	0 0 1	26	0 0 1	44	0 0 2	51	0 0 2	76	0 0 3
Net Cost	13,157	2 2 7	13,132	2 0 6	13,326	2 2 6	13,176	2 1 8	13,537	2 2 6
Food per person per week	...	10/-	...	9/11d.	...	9/11d.	...	9/9½d.	...	9/10d.

TABLE D.S. VI.

Table shewing Condition of Patients discharged from the Derbyshire Sanatorium, Chesterfield, from 1915-1929 inclusive.  
Actual Figures and Percentages.

YEAR OF DISCHARGE FROM SANATORIUM.																							
1915-1920.		1921.		1922.		1923.		1924.		1925.		1926.		1927.		1928.		1929.		Total.			
No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.		
...		514	40.13	86	34.13	90	32.49	73	26.45	84	27.01	79	23.45	24	7.81	9	4.07	3	1.04	—	—	962	24.83
Cured	...	...		...		...		...		...		...		...		...		...		...		501	12.94
Arrested	...	48	3.74	17	6.74	10	3.61	30	10.88	52	16.72	64	18.99	118	38.44	57	25.80	76	26.58	92	8.90	...	...
Not arrested	...	10	.78	4	1.58	3	1.08	7	2.53	13	4.18	10	2.96	21	6.84	32	14.48	65	22.73	163	50.00	328	8.46
Condition not ascertain'd	...	7	.54	3	1.19	1	.36	1	.36	8	2.57	4	1.18	7	2.28	12	5.42	8	2.79	5	1.53	56	1.44
Lost sight of or not Tuberculosis	...	293	22.88	43	17.07	45	16.25	41	14.86	47	15.11	51	15.14	37	12.06	38	17.20	34	11.89	32	9.81	661	17.07
Dead	...	409	31.93	99	39.29	128	46.21	124	44.92	107	34.41	129	38.28	100	32.57	73	33.03	100	34.97	97	29.76	1366	35.26
Total	...	1281	100.00	252	100.00	277	100.00	276	100.00	311	100.00	337	100.00	307	100.00	221	100.00	286	100.00	326	100.00	3874	100.00

## PENMORE PAVILION.

During the year this pavilion has continued to be used for the treatment of advanced female patients, under the clinical charge of Dr. B. S. Nicholson, the Tuberculosis Officer for the Chesterfield Area.

The admissions and discharges that have taken place during the year are as follows :—

TABLE P.I.

Patients in the Pavilion on the 1st January, 1930	14
Admissions ... ..	35
Discharges ... ..	37
Patients in the Pavilion on the 31st December, 1930	12
Condition of patients on discharge :—	
Improved ... ..	19
No material improvement ... ..	7
Died in the Institution ... ..	10
Not tuberculous ... ..	1
Total ... ..	37

The average duration of stay of the 37 patients discharged or who died in the Institution was 133·9 days, and the daily average number of beds occupied was 13·1, or 93 per cent. of the full capacity. The cost per patient per day for the year ended 31st March, 1930, was 6s. 7d., at the time of printing this Report, the figures for the financial year ended March 31st, 1931, are not available. The average gain in weight of the 19 patients discharged as improved was 7·8 lbs., and, at the time of writing, six of these patients are known to be alive and working—one all day in a silk factory.

Considerable improvements were made in the Institution during the year. All the old beds were replaced by new Nesbit patent beds. New bed tables, bed rests, rest chairs, and a modern steam sterilizer were provided. Wireless was installed and a loud speaker provided in the verandah of each pavilion. A lawn has been laid in front of the pavilion, and round it a privet hedge has been planted, which, when grown, will be a great boon to the patients who are able to sit out in the summer time.

## WHITWORTH HOSPITAL.

The use of the block of six beds at this Hospital was continued during the year for the treatment of acute, febrile, and advanced cases of pulmonary tuberculosis in males, under the clinical charge of Dr. P. Heffernan, the Tuberculosis Officer for the north-western area of the County. This block was opened in July, 1929, and a detailed description is given in my report for that year.

The admissions and discharges that have taken place during the year are as follows :—



TABLE W 1.

Patients in the Hospital on January 1st, 1930 ...	...	6
Admissions ...	...	16
Discharges... ..	...	16
Patients in the Hospital on December 31st, 1930 ...	...	6
Condition of patients on discharge :—		
Improved ... ..	...	4
No material improvement ...	...	6
Died in the Institution ...	...	5
Transferred to the Sanatorium ...	...	1

One patient who developed an acute surgical condition was transferred to the general surgical ward of the Hospital and was successfully operated on by the visiting surgeon to the Hospital. This patient is now at home and working.

The average duration of stay of the 16 patients discharged during the year was 127·8 days, and the daily average number of beds occupied was 5·7, or 95 per cent. of the full capacity. The cost per patient per day for the nine months ended March 31st, 1930, was 7s. 7d. At the time of printing this Report, the figures for the financial year ended March 31st, 1931 are not available.

Dr. Heffernan reports as follows :—

This little Hospital block has been a great boon to the class of patient for which it caters. It occupies a sheltered and sunny position, and, while its excellent through ventilation assures a fresh atmosphere at all times, unnecessary and harmful exposure of the patients is avoided. There is an open fire-place in each ward, in addition to which central heating is supplied from the main hospital installation.

While local circumstances preclude any considerable further development in the work of this hospital block, it has become obvious that in the organisation of similar hospitals or hospital blocks in other parts of the county, a larger number of beds should be available, and facilities should be provided for carrying out, under X-ray control, the induction of artificial pneumothorax and re-fills for local cases in which induction has been effected at Walton Sanatorium, thus relieving that Institution of some very important but very time-consuming work.

The successful working of the block is largely attributable to the able and sympathetic manner in which the Matron and Sister-in-Charge carry out their duties.

#### **BRETRY HALL ORTHOPÆDIC HOSPITAL.**

The Medical Superintendent, Dr. G. A. Q. Lennane, reports on the work of this Institution during the year, as follows :—

The year 1930 saw the completion of the two open-air pavilions whose erection had been authorised by the County Council. On January 25th, the 50-bed pavilion for non-tubercular crippled children was opened for the reception of patients, and on July 18th the first adult tubercular patients were admitted to a 32-bed pavilion, built on the most up-to-date lines. A full description of both these pavilions has appeared in previous reports of the County Medical Officer.

An official opening ceremony for both blocks was performed by Lady Maud Baillie, accompanied by His Grace the Duke of Devonshire, on September 22nd.

The opening of these two buildings considerably reduced the waiting lists for admission to the hospital and enabled Derbyshire cases under treatment in other hospitals, such as Oswestry and Margate, to be transferred to their own County Hospital. Nevertheless, the waiting list in the case of non-tubercular children is fairly high.

The increased number of patients necessitated the appointment of an Assistant Resident Medical Officer, and Dr. Elizabeth Grierson was appointed to this position on May 13th, 1930. Additional sisters, nurses and maids had also to be appointed, and the total resident staff now numbers 60.

Considerable attention has been paid to the training of the nursing staff, and systematic lectures have been given in Anatomy, Physiology, Hygiene, and Elementary Medical and Surgical Nursing, the standard aimed at being that of the preliminary examination of the General Nursing Council. In addition to this, they also receive instruction in orthopædic and surgical tuberculosis nursing. It was decided to award annually a silver medal to the best senior nurse of the year. The training that the nurses receive at this hospital thus stands them in very good stead should they subsequently enter for a general training.

The treatment of patients was continued on the lines mentioned in last year's report, and very satisfactory results are being obtained, especially in the treatment of tuberculosis of the hip by the method, adopted by Dr. W. T. G. Pugh, at Queen Mary's Hospital, Carshalton, of traction by suspension without fixation.

Patients in hospital on January 1st, 1930—M. 39 (T.B. 33, Non-T.B. 6); F. 28 (T.B. 24, Non-T.B. 4); total 67.

Admissions during 1930—M. 101 (T.B. 53, Non-T.B. 48); F. 81 (T.B. 33, Non-T.B. 48); total 182.

Thirteen patients did not accept offer of treatment at the hospital.

The number of patients treated during the year was—M. 140 (T.B. 86, Non-T.B. 54); F. 109 (T.B. 57, Non-T.B. 52); total 249. The diseases from which these patients suffered are shown in the following table:—

<i>Cases admitted as Non-Pulmonary Tuberculosis treated during 1930.</i>				<i>Cases of Non-Tubercular Diseases treated during 1930.</i>		
<i>Site of Lesion.</i>	<i>M.</i>	<i>F.</i>		<i>Lesion.</i>	<i>M.</i>	<i>F.</i>
Spine ... ..	27	29		Rickets ... ..	7	8
Hip ... ..	28	9		Talipes ... ..	10	8
Knee ... ..	13	8		Infantile Paralysis	12	14
Other Joints ..	10	8		Spastic Paraplegia	7	6
Abdomen ..	5	1		Torticollis ...	1	5
Peripheral Glands	3	2		Pes Cavus ..	6	—
				Miscellaneous ...	11	11
Totals ...	86	57			54	52

There were four deaths during the year, as shewn in the following table :—

<i>Site of Lesion.</i>	<i>Cause of Death.</i>	<i>M.</i>	<i>F.</i>	<i>Total.</i>
Spine ... ..	Miliary Tuberculosis ...	1	—	1
Hip ... ..	Amyloid Disease ... ..	1	—	1
Abdomen ...	Tubercular Peritonitis ...	1	—	1
Talipes ...	Cerebral Abscess ... ..	—	1	1
		3	1	4

The number of patients discharged during the year was—M. 64, F. 46. The following tables give details of cases completed during the year :—

### **Tubercular.**

#### *Cases admitted as Non-Pulmonary Tuberculosis completed during 1930.*

<i>Site of Lesion.</i>	<i>Diagnosis not confirmed.</i>		<i>Discharged.</i>		<i>Died.</i>		<i>Total.</i>
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
Spine ... ..	1	—	5	10	1	—	17
Hip ... ..	6	1	6	1	1	—	15
Knee ... ..	1	1	6	3	—	—	11
Other Joints ..	1	2	1	1	—	—	5
Abdomen ...	2	1	2	—	1	—	6
Peripheral Glands	—	—	1	1	—	—	2
Total ...	11	5	21	16	3	—	56

It will be noticed from the above table that no less than 16 of the cases were diagnosed in error, the commonest condition simulated being that of tuberculosis of the hip. In several cases it was found that these patients were suffering from Pseudocoxalgia (Perthe's Disease). Of these 16 cases, two adults were transferred to other institutions for treatment ; the remainder were children and were discharged during the year well or improved.

Of the 37 patients discharged who were definitely diagnosed as tubercular, all were discharged as quiescent with the exception of four. Of these—

- 2 were removed by parents before treatment was complete ;
- 1 was discharged to a general hospital for appendicectomy, and subsequently re-admitted ;
- 1 was transferred to the care of the Public Assistance Committee as incurable.

### Non-Tubercular.

*Cases of Non-Tubercular Diseases  
completed during 1930.*

<i>Lesion.</i>	<i>Discharged.</i>		<i>Died.</i>		<i>Total.</i>
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
Rickets ... ..	5	4	—	—	9
Talipes ... ..	5	3	—	1	9
Infantile Paralysis...	4	4	—	—	8
Spastic Paraplegia...	5	1	—	—	6
Torticollis ... ..	1	4	—	—	5
Pes Cavus ... ..	5	—	—	—	5
Miscellaneous ... ..	7	9	—	—	16
Total ... ..	32	25	—	1	58

Average length of stay of patients—T.B. cases 633 days ; Non-T.B. cases, 152 ; all cases, 354 days.

It will be seen from the tables relating to the results of treatment that where this treatment has not been interrupted, in nearly all cases improvement is shown. Unfortunately, these cases cannot be regarded as cured until an interval of three years has elapsed since the disease has become quiescent. Nevertheless, the great majority of these patients ultimately become cured, and are able to pursue a normal existence.

With regard to the non-tubercular patients, although it may be impossible to cure a deformity, such improvement of function results from proper treatment that their disabilities are minimised to a remarkable extent.



During 1930, the following operations were performed :—

Stabilisation of Foot	...	...	...	...	...	11
Mid-Tarsal Resection	...	...	...	...	...	2
Elongation of Tendo Achilles	...	...	...	...	...	7
Tenotomy and Wrenching	...	...	...	...	...	17
Wrenching alone	...	...	...	...	...	12
Osteotomy	...	...	...	...	...	12
Osteoclasis	...	...	...	...	...	4
Manipulation	...	...	...	...	...	9
Plantar Fasciotomy	...	...	...	...	...	9
Reposition of Slipped Epiphysis...	...	...	...	...	...	1
Amputation of Foot	...	...	...	...	...	1
Amputation of Little Toes	...	...	...	...	...	1
Arthrodesis of Shoulder	...	...	...	...	...	2
Transplantation of Tendons	...	...	...	...	...	5
Stoffel's Operation	...	...	...	...	...	2
Resection of Rib	...	...	...	...	...	1
Sequestrectomy	...	...	...	...	...	3
Open Division of Sterno-Mastoid	...	...	...	...	...	1
Stretching of Sterno-Mastoid	...	...	...	...	...	1
Excision of Knee	...	...	...	...	...	1
„ Elbow	...	...	...	...	...	1
„ Interphalangeal Joint	...	...	...	...	...	1
„ Ganglion of Wrist	...	...	...	...	...	1
Aspiration of Abscess	...	...	...	...	...	11
Curettage of Abscess	...	...	...	...	...	2
Appendicectomy	...	...	...	...	...	2
Removal of Finger Nail	...	...	...	...	...	2
Circumcision	...	...	...	...	...	1
Removal of Tonsils and Adenoids	...	...	...	...	...	34
Total						157

Cases treated by Massage and Exercises ... 170

Cases treated by Faradism ... 6

Cases treated by Artificial Sunlight ... 68

**Dental Work.** 35 patients were seen and treated by the County dental staff.

**Ophthalmic Work.** Periodic visits are paid by the County Ophthalmic Surgeon, so that cases of refraction and other diseases of the eye may be treated.

**The Consulting Surgeon,** Mr. Naughton Dunn, attended on 13 occasions to see patients, and performed 43 operations.

**Infectious Disease.** The Hospital was singularly free from infectious disease. During the autumn there were two cases of ringworm, and in November a mild epidemic of chickenpox, the total number of cases affected being six. No cases of diphtheria



**Education.** All the children between the ages of five and 16 are subject to educational instruction, and for this purpose there is a non-resident staff of three teachers. The tuition is mainly individual, and encouraging results are being obtained. This aspect of the activities of the hospital is of great importance in view of the prolonged time occupied by the treatment, and, moreover, it should be remembered that they may subsequently have to earn their living by clerical rather than manual work.

**Orthopædic Clinics.** The ten clinics, situated in various parts of the County, serve as an extensive Out-Patient Department of the Hospital, readily accessible by residents of all parts of Derbyshire.

Convincing evidence of their popularity is shown by the increased attendances at nearly all of them during the year. This was particularly noticeable in the clinics at Chesterfield, Alfreton, and Heanor. At Shirebrook, Bakewell, and Belper, attendances were not very satisfactory, though Shirebrook improved towards the end of the year. The other two clinics are only held fortnightly, and the premises at which they are held are not entirely suitable. These reasons may explain the unsatisfactory attendances.

Increasing use of the clinics as a means of obtaining consultant's opinion is being made by general practitioners, and many patients are being sent direct to the clinics instead of through the medium of the Tuberculosis Officers and School Medical Officers. The Voluntary Hospitals in the County are also finding the clinics of considerable assistance to them in dealing with cases which are not suitable for them, owing to the lengthy treatment required.

The treatment given at the clinics consists mainly in exercises, manipulations without anæsthetic, application of splints, and a certain amount of plaster work. The latter is not, however, very satisfactory, as it is found that, owing to the home conditions of the patients, sores are apt to develop, and the plaster is allowed to become dirty. Other important functions of the clinics are those of diagnosis, for which adequate X-Ray facilities are now available, and supervision of cases after discharge from Bretby.

The following cases were treated at the clinics during 1930 :—

**Tubercular Cases.**

Situation of Lesion.	Alfreton.	Bakewell.	Belper.	Chesterfield.	Chinley.	Derby.	Heanor.	Long Eaton.	Shirebrook.	Swadlincote.	TOTAL.
Spine ... ..	—	4	3	8	5	5	2	5	3	6	41
Hip ... ..	5	1	2	7	4	1	1	2	4	5	32
Knee ... ..	2	1	—	8	5	4	1	2	2	2	27
Other Joints ..	1	1	—	3	3	4	2	—	—	1	15
Abdomen ... ..	1	—	—	—	1	—	—	—	—	1	3
Periph'al Glands	—	1	1	—	2	1	1	—	—	3	9
Other Organs .	—	—	—	—	—	—	—	—	—	—	—
Total ... ..	9	8	6	26	20	15	7	9	9	18	127

**Non-Tubercular Cases.**

Lesion.	Alfreton.	Bakewell.	Belper.	Chesterfield.	Chinley.	Derby.	Heanor.	Long Eaton.	Shirebrook.	Swadlincote.	TOTAL.
Rickets ... ..	17	4	12	26	4	11	13	8	11	31	137
Inf. Paralysis ..	15	13	5	22	9	19	5	4	11	7	110
Spastic Paraplegia ...	5	2	8	8	4	16	2	2	3	10	60
Scoliosis ... ..	27	5	5	23	4	9	6	6	6	24	115
Cong. Deformity	14	3	9	13	4	17	11	10	11	19	111
Unclassified ..	38	9	13	35	9	23	13	13	15	21	189
Total ... ..	116	36	52	127	34	95	50	43	57	112	722
Total Attendances	1406	191	227	710	222	538	366	439	500	879	5478
No. of Plasters Applied ...	—	3	—	—	8	2	13	—	—	4	30

Appliances and splints were in most cases obtained from Bretby Hospital, but in a few cases, owing to their nature, they were obtained elsewhere, as facilities were not available for their manufacture at Bretby.



**BRETBY HALL ORTHOPÆDIC HOSPITAL.**  
**TABLE B. I.**  
**Comparative Statement of Costs.**

Year ending March 31st.

	1927		1928		1929		1930		1931	
	Average Daily No. of Patients	do. Staff								
	50·9	19	56·1	20·6	63·5	24·9	71·8	29·4	135·8	50·4
	Total Cost.	Cost per week per patient.	Total Cost.	Cost per week per patient.	Total Cost.	Cost per week per patient.	Total Cost.	Cost per week per patient.	Total Cost.	Cost per week per patient.
	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.
Salaries, and Wages	1,897	17 3	2,206	15 1	2,264	13 8	2,660	14 3	4,146	0 11 9
Provisions	762	6 10	1,298	8 10	1,765	10 8	1,949	10 5	3,216	0 9 1
Drugs and Medical Appliances...	244	2 2	273	1 10½	340	2 1	377	2 1	885	0 2 6
Fuel, Light and Water	638	5 9	614	4 2	814	4 11	802	4 3	983	0 2 9
Domestic and Laundry	504	4 5	443	3 0	314	1 11	700	3 9	564	0 1 7
Renewals and Repairs	1,318	11 11	1,223	8 4	887	5 4	1,133	6 0	1,605	0 4 6
Miscellaneous	241	2 2	368	2 6	170	1 0	288	1 6	378	0 1 1
Rates, Taxes and Insurance	226	2 1	224	1 6½	196	1 2	284	1 6	304	0 0 10
Loan Repayment and Interest	1,757	15 10	1,825	12 6	2,056	12 5	2,672	14 3	3,322	0 9 4
Gross Totals	7,587	3 8 5	8,474	2 17 10	8,806	2 13 2	10,865	2 18 0	15,403	2 3 5
Deduct Rents, etc.	294	2 8	271	1 10	359	2 2	314	1 8	480	0 1 4
Nett Totals	7,293	3 5 9	8,203	2 16 0	8,447	2 11 0	10,551	2 16 4	14,923	2 2 1

Food per person per week      4/9      6/6      7/8      7/4      6/8

## OTHER INSTITUTIONS.

After July, 1930, consequent upon the opening of the 32-bed block at Bretby for the accommodation of adults suffering from surgical tuberculosis, it was no longer necessary to admit patients with bone, joint or glandular tuberculosis to outside institutions.

There were ten patients in outside institutions on the 1st January, 1930, 14 patients were admitted from January to July, 13 were discharged during that period, 10 patients were transferred to Bretby, and one case, owing to exceptional circumstances, was allowed to remain at the Shropshire Orthopædic Hospital to continue his treatment.

The condition of the 13 patients discharged is as follows :—

Quiescent ...	...	...	...	6
Improved ...	...	...	...	3
No material improvement	...	...	...	3
Died in the Institution	...	...	...	1

## POOR LAW INSTITUTIONS.

In connection with institutional accommodation for tuberculosis, the Ministry of Health required a statement to be furnished giving the number of beds available in Poor Law Institutions belonging to the County Council, together with a return showing the extent of residential treatment provided during the year in these institutions for persons chargeable to the Council.

A copy of this return is given in the following Table :

TABLE T.VI.

**NUMBER OF BEDS AVAILABLE FOR THE TREATMENT OF TUBERCULOSIS  
ON THE 31st DECEMBER, 1930,**

**IN POOR LAW INSTITUTIONS BELONGING TO THE COUNCIL.**

Name of Institution.	For PULMONARY cases.		For NON-PULMONARY cases.		TOTAL.
	Adults.	Children under 15	Adults.	Children under 15	
Ashbourne Poor Law Institution	2	—	—	—	2
Bakewell       "       "	4	—	—	—	4
Belper       "       "	7	1	4	—	12
Chapel-en-le-Frith       "	4	—	—	—	4
Chesterfield       "       "	7	1	1	2	11
Glossop       "       "	—	1	2	1	4
*Hayfield       "       "	—	—	—	—	—
Shardlow       "       "	8	—	—	—	8
Total       ...	32	3	7	3	45

\*No beds set apart and no tuberculous patients in the Institution on Dec. 31st, 1930.

**Return showing the Extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.**

		In Insti- tions on Jan. 1st.	Admitted during year.	Discharged during year.	Died in the In- stitution.	In Insti- tions on Dec. 31st
Number of patients suffering from pulmonary tuberculosis admitted for treatment.	Adult					
	Males	12	18	6	15	9
	Adult Females	6	9	4	5	6
	Children	3	1	—	1	3
	Total	21	28	10	21	18
Number of patients suffering from non-pulmonary tuberculosis admitted for treatment.	Adult					
	Males	8	4	5	2	5
	Adult Females	5	1	3	—	3
	Children	4	6	3	4	3
	Total	17	11	11	6	11
GRAND	TOTAL	38	39	21	27	29

**NOTIFICATION.**

During the year there were 709 primary notifications of all forms of tuberculosis as compared with 702 in 1929. Details of the age groups are given in Table T.VII

As in former years, the Ministry of Health asked for a statement of the number of cases that came to my knowledge otherwise than by notification. Details are given in Table T.VIII.

It is pleasing to note that there has been a considerable decrease in this figure as compared with 1929, the figures being 107 and 141 respectively. This decrease is largely due to efforts made by the Central Office for the past few years to secure notification wherever possible. Of the deaths returned by local registrars and transferable deaths from the Registrar General, 50 cases had not been notified as compared with 82 for 1929; 32 cases were notified after death as compared with 34 for 1929. Of the cases transferred into the County from other areas, notification of 14 cases could not be secured as against 19 in the previous year. Of the patients admitted to or discharged from institutions outside the County, notification could not be obtained in three instances, compared with 6 for 1929. From the quarterly summaries furnished under the Public Health (Tuberculosis) Regulations, 1924, by the Local Medical Officers of Health in the County, particulars of 8 cases were given who had died from tuberculosis, but who had not been notified. The corresponding figure was not available in 1929.

TABLE T. VII.

TUBERCULOSIS NOTIFICATIONS (FORM A.)														TUBERCULOUS NOTIFICATIONS (FORM B.)					
	NUMBER OF PRIMARY NOTIFICATIONS.													Total Notifica- tions on Form A.	NUMBER OF PRIMARY NOTIFICATIONS.				Total Notifica- tions on Form B.
	0—1	1—5	5—10	10—15	15—20	20—25	25—35	35—45	45—55	55—65	65 and up- wards.	Total Primary Notifi- cations.	Under 5		5—10	10—15	Total (0—15)		
Age Periods	0—1	1—5	5—10	10—15	15—20	20—25	25—35	35—45	45—55	55—65	65 and up- wards.	Total Primary Notifi- cations.	Total Notifica- tions on Form A.	Under 5	5—10	10—15	Total (0—15)	Total Notifica- tions on Form B.	
Pulmonary—																			
Males ...	—	3	16	7	27	33	57	41	32	15	5	236	241	—	—	—	—	—	
Females ...	1	2	10	12	37	49	47	37	25	10	2	232	239	—	—	—	—	—	
Non-Pulmonary—																			
Males ...	1	27	28	23	19	5	8	2	3	4	—	120	121	—	3	—	3	3	
Females ...	1	14	30	21	13	14	12	8	2	—	2	117	118	—	—	1	1	1	
TOTALS ...	3	46	84	63	96	101	124	88	62	29	9	705	719	—	3	1	4	4	



TABLE T. VIII.  
NEW CASES OF TUBERCULOSIS COMING TO THE KNOWLEDGE OF THE COUNTY MEDICAL OFFICER OF HEALTH DURING THE YEAR  
1930, OTHERWISE THAN BY NOTIFICATION ON FORM A.

AGE PERIODS	0—1	1—5	5—10	10—15	15—20	20—25	25—35	35—45	45—55	55—65	65 and upwards	Total Cases.
Pulmonary— Males ...	—	2	1	2	2	3	2	8	6	7	3	36
Females ...	1	—	2	1	1	6	4	1	2	2	1	21
Non-Pulmonary— Males ...	2	6	6	4	—	5	3	3	1	—	—	30
Females ...	—	6	4	3	4	1	1	1	—	—	—	20
TOTALS ...	3	14	13	10	7	15	10	13	9	9	4	107

THE SOURCE OR SOURCES FROM WHICH INFORMATION AS TO THE ABOVE-MENTIONED CASES WAS OBTAINED :—

	SOURCE OF INFORMATION.	No. of CASES	
		Pulmonary.	Non-Pulmonary.
Death Returns	{ From Local Registrars ... { Transferable Deaths from Registrar-General ...	14 7	12 17
Posthumous Notifications	... ..	16	16
“Transfers” from other areas	... ..	11	3
Forms C & D (in respect of cases not previously known to the M.O.H.)	... ..	3	—
Other Sources (Deaths returned on Local Medical Officer's Quarterly Summaries of cases not previously notified to County Medical Officer)	... ..	6	2

## DEATHS FROM TUBERCULOSIS.

TABLE T.IX.

## CASES REPORTED BY LOCAL REGISTRARS.

			Number of deaths reported in	Percentages	
				1930.	1929.
Cases not notified	...	...	26	8.84	14.16
Notified after death	...	...	33	11.22	11.95
Notified 1 week before death	...	...	16	5.44	4.09
2 weeks before death	...	...	8	2.72	1.26
3 weeks before death	...	...	8	2.72	1.89
4 weeks before death	...	...	3	1.02	1.57
1—2 months before death			23	7.82	5.03
2—3	„	„	20	6.81	6.60
3—12	„	„	52	17.70	19.18
Over 1 year	„	„	105	35.71	34.27
			—		
			294		

## INQUIRY INTO DEATHS OF PERSONS NOT NOTIFIED.

368 deaths from tuberculosis were recorded by the Registrar General as having occurred in Derbyshire during the year 1930, but 374 deaths of persons suffering from tuberculosis came to my knowledge during the year. It should be borne in mind, however, that tuberculosis may not have been the primary cause of death in all these cases. The following table shows the sources from which the information was received, the number notified under the Public Health (Tuberculosis) Regulations, and the percentage of cases so notified :—

<i>Source of information.</i>	<i>Number of Deaths.</i>	<i>Number Notified. before death</i>	<i>Percentage notified before death</i>
Local Registrars ... ..	294	235	79.92
Further deaths recorded on the Quarterly Summaries fur- nished under the Public Health (Tuberculosis) Regu- lations, 1924, by the Local Medical Officers ... ..	38	33	86.82
Transferable Deaths reported by Registrar General ... ..	42	9	21.43
Total ...	374	277	74.07

The percentage of cases notified before death thus shows a slight improvement on the figure for the previous year, namely, 73.3.

## PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1924.

From the Quarterly Summaries returned from District Medical Officers of Health in accordance with these Regulations, the following table has been compiled, showing the number of cases of all forms of tuberculosis remaining on their registers on December 31st of each year.

Year.	PULMONARY.			NON-PULMONARY.			TOTAL
	Males.	Females.	Total.	Males.	Females.	Total.	
1925	1350	1077	2427	458	386	844	3271
1926	1447	1164	2611	542	473	1015	3626
1927	1466	1218	2684	626	556	1182	3866
1928	1519	1260	2779	691	614	1305	4084
1929	1498	1283	2781	744	632	1376	4157
1930	1380	1238	2618	720	628	1348	3966

TABLE T.X.

## NOTIFICATIONS AND DEATHS.\*

Year.	Notifications.		Deaths.	
	Pulmonary.	All Forms.	Pulmonary.	All Forms.
1915	727	990	414	557
1916	878	1,098	410	552
1917	893	1,146	405	621
1918	829	1,123	489	667
1919	919	1,176	392	525
1920	787	1,052	334	461
1921	611	830	344	464
1922	671	882	354	481
1923	736	994	345	454
1924	717	1,018	359	476
1925	712	945	364	481
1926	594	887	337	467
1927	489	795	323	439
1928	549	814	321	452
1929	473	702	340	442
1930	468	705	265	368

\*(Registrar General's figures).

TABLE T.XI.

Death-rate from Phthisis or Pulmonary Tuberculosis since 1891.

Year.	Derbyshire.	England and Wales.
1891-1900	1·08	1·37
1901-1910	·81	1·16
1911-1920	·71	1·07
1921	·58	·884
1922	·59	·889
1923	·57	·836

<i>Year.</i>	<i>Derbyshire.</i>	<i>England and Wales.</i>
1924	·59	·841
1925	·59	·833
1926	·54	·771
1927	·52	·791
1928	·51	·754
1929	·53	·793
1930	·42	...

#### REFRACTORIES INDUSTRIES (SILICOSIS) SCHEME, 1925

During the year 1930, 11 persons were examined by the Tuberculosis Officers within a month of their commencing work in the industries.

#### SANDSTONE INDUSTRY (SILICOSIS) SCHEME, 1929.

During 1930, 24 persons were examined by the Tuberculosis Officers under this scheme, and one worker was suspended because he did not conform to the standard of physique required.

#### PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

During the year there came to my knowledge five persons engaged in the milk trade who were suffering from tuberculosis and were in an infectious state. In two instances the patients gave an assurance to the Tuberculosis Officer that they would not take part in the handling of milk, and, apart from periodic inspections to confirm that the assurance was adhered to, no further action was taken. The attention of the Local Medical Officers of Health concerned was drawn to the remaining three cases. In one instance no reply was received from the Medical Officer; in another, I received a reply to the effect that a signed statement had been obtained from the patient that he would take no further part in the handling of milk; and in the third case, the Local Authority prohibited the man from dealing in milk. This was followed by a claim for compensation but, as far as I am aware at the time of writing, the case has not, been settled.

#### PUBLIC HEALTH ACT, 1925 (Section 62)

During 1930, two female patients suffering from advanced pulmonary tuberculosis, who were in an infectious state and who, if they remained at their homes would be a source of danger to other members of the household, were reported to me by the Tuberculosis Officers as refusing to enter a suitable institution. Legal action was threatened in each case. In one instance the patient thereupon agreed to enter Penmore voluntarily, remained there for nearly three months, and died in the institution; the other case refused to go to Penmore, but found alternative accommodation in the house of a friend; the Tuberculosis Officer visited the house, and found the accommodation offered was such that there would be no danger of infection to others in the household. Consequently, no legal action was taken.



## OTHER SERVICES.

Arrangements for nursing of bed-ridden cases, granting of extra nourishment, the after-care of tuberculous patients and the provision of shelters were described on pages 88—89 on my survey report of 1925. With the exception of the nursing of bed-ridden cases, no changes have taken place in these services during 1930, but in this instance, during the year the County Council authorised a revised scale of fees to district Nursing Associations, which are as follows :—

2/6 for the first week, irrespective of the number of visits paid; and

1/- a visit afterwards, with a maximum payment of 2/6 a week for each case.

The work done under the above services is tabulated below :—

Home visited by Health Visitors :—

Dispensary cases	•	...	...	...	...	7,365
Other cases	...	...	...	...	...	798
						<hr/> 8,163 <hr/>

Number of bed-ridden cases nursed	...	...	8
-----------------------------------	-----	-----	---

Extra Nourishment :—

No. of patients to whom milk was granted	...	69
Cost	...	£184

Shelters :—

No. sold during 1930	...	2
No. in use at end of 1930	...	79
No. in store at end of 1930	...	22
Sets of beds and bedding supplied	...	18
Shelters supplied but not in use	...	14
Shelters damaged beyond repair	...	2

**X-Rays.** The following table shows the number of patients who were submitted to X-Rays during the year 1930, in the various Dispensary areas, and the number X-Rayed at the Derbyshire Sanatorium and Bretby Hall Orthopædic Hospital :—

<i>Dispensary Area.</i>				<i>No. of Patients.</i>
Ashbourne	...	...	...	39
Burton	...	...	...	48
Chesterfield	...	...	...	375
Chinley	...	...	...	55
Derby	...	...	...	124
Glossop	...	...	...	14
Ilkeston	...	...	...	54
Long Eaton	...	...	...	62
Matlock	...	...	...	54
				825
Derbyshire Sanatorium	...			974
Bretby Hall Orthopædic Hospital				715
				2,514

**Bacteriological Examination of Sputa.**—The following Table shows the number of examinations of sputa for tubercle bacilli made in the County Laboratory during the year :—

TABLE T. XII.

	<i>Pos.</i>	<i>Neg.</i>	<i>Total</i>
From Medical Practitioners ...	116	1,034	1,200
From Dispensaries and Sanatoria	249	912	1,161
From Hospitals ... ..	—	—	—
Total ... ..	415	1,946	2,361

TABLE T. XIII.

*Specimens of sputum examined by the Ellerman and Erlandsen method during the year ending December 31st, 1930.*

Up to 10 years		11—20		21 & over		Totals	
<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>	<i>Pos.</i>	<i>Neg.</i>
4	159	15	321	29	499	48	979

TABLE T. XIV.—(a) PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of Dispensaries at the end of 1930, arranged according to the years in which the patients first came under Public Medical Treatment for pulmonary tuberculosis, and their classification.

Condition at the time of the last record made during the year to which the Return relates	Previous to 1926.				1926.				1927.				1928.				1929.				1930.				Grand Total.	Percentage.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Class T. B. plus		Total (Class T. B. plus).		Class T. B. minus.		Group 1.		Group 2.		Group 3.		Total (Class T. B. plus).		Class T. B. minus.		Group 1.		Group 2.		Group 3.		Total (Class T. B. plus).				Class T. B. minus.		Group 1.		Group 2.		Group 3.		Total (Class T. B. plus).																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Group 1.	Group 2.	Group 3.	All Groups	Group 1.	Group 2.	Group 3.	Group 1.	Group 2.	Group 3.	Group 1.	Group 2.	Group 3.	Group 1.	Group 2.	Group 3.	Group 1.	Group 2.	Group 3.	Group 1.	Group 2.	Group 3.	Group 1.	Group 2.			Group 3.	Group 1.	Group 2.	Group 3.	Group 1.	Group 2.	Group 3.	Group 1.	Group 2.	Group 3.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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TABLE T. XIV.—(b) NON-PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in possession of the Dispensaries at the end of 1930, arranged according to the years in which the patients first came under Public Medical Treatment, and their classification.

Condition at the time of the last record made during the year to which the Return relates.	Previous to 1926.				1926.				1927.				1928.				1929.				1930.				Grand Total.	Percentage.		
	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.			Total.	
ALIVE.	Discharged as cured	All Groups																										
		M.	74				M.	113				M.	334				M.	297				M.	893				42.38	
		F.					F.					F.					F.					F.						
		Chil. Ad's					Chil. Ad's					Chil. Ad's					Chil. Ad's					Chil. Ad's						
	Disease arrested	M.	5	1	4	10	M.	2	1	3	6	M.	13	1	8	23	M.	9	1	4	14	M.	317				15.04	
		F.	2	4	4	10	F.	1	1	2	4	F.	8	6	2	16	F.	3	1	3	7	F.						
		Chil. Ad's					Chil. Ad's					Chil. Ad's					Chil. Ad's					Chil. Ad's						
		F.	6	1	1	8	15	F.	6	2	13	21	F.	7	6	2	15	F.	1	1	1	3	F.					
	Disease not arrested	M.	3	2	1	6	M.	3	1	1	5	M.	6	2	1	9	M.	3	1	1	5	M.	333				15.80	
		F.	2	2	1	5	F.	2	2	1	5	F.	4	4	1	9	F.	2	2	1	5	F.						
		Chil. Ad's					Chil. Ad's					Chil. Ad's					Chil. Ad's					Chil. Ad's						
		F.	3	5	1	9	F.	4	4	1	9	F.	7	6	2	15	F.	5	5	1	11	F.						
Transferred to Pulmonary	1	1	3	5	1						1										8					.38		
Condition not ascer- tained during the Year	2	2	1	4	9																35					1.66		
Lost sight of or otherwise removed from Dispensary Register	290																				373					17.71		
DEAD.	M.	23				M.	12				M.	25				M.	148									7.03		
	F.					F.					F.					F.					F.							
	Chil. Ad's					Chil. Ad's					Chil. Ad's					Chil. Ad's					Chil. Ad's							
	F.	20	2	2	2	24	F.	2	2	2	6	F.	2	2	2	6	F.	2	2	2	6	F.						
TOTALS	1290	53	39	19	85	196	71	29	10	61	171	39	26	8	58	131	62	29	13	62	157	66	20	13	63	162	2107	100.00

ALIVE.



## BLIND PERSONS ACT, 1920.

At the end of 1930 there were 741 Blind Persons (408 males and 333 females) on the Register. Of these, 333 were in receipt of County relief at a total cost of £7,816 per annum. The average amount of relief per case was 9/0½ per week.

The Scheme under the Blind Persons Act, 1920, for the Administrative County of Derby, adopted by the Council on the 5th October, 1921, and amended by the Council on the 1st day of May, 1929, 5th day of November, 1930, and 28th day of January, 1931, is as follows :—

The Council will provide for the undermentioned classes of Blind Persons as hereinafter set out.

## 1. CHILDREN UNDER SCHOOL AGE.

To make provision for cases not already suitably provided for by admission to the Babies' Home, Chorley Wood, or a similar Institution, and to assist in the administration of the Maternity and Child Welfare Act, 1918.

## 2. EDUCATION AND TRAINING OF CHILDREN BETWEEN 5 AND 16 YEARS OF AGE.

Provision will be made by the Education Committee.

## 3. EDUCATION AND TRAINING OF ADULTS.

Provision will be made by the Education Committee.

## 4. EMPLOYMENT.

To provide employment at standard rates of wages for suitable cases at the Royal Midland Institution for the Blind, or a similar Institution, and to augment the wages of Blind Persons so employed, where necessary.

## 5. HOME WORKERS.

To provide home employment for suitable cases where admission to a workshop cannot be obtained, and for this purpose to assist the Home Workers Scheme in connection with the Midland Institution for the Blind, or similar Institution, and to augment the earnings of Home Workers, and, in suitable cases, of other Blind Workers.

## 6. HOME TEACHING.

In conjunction with the Royal Midland Institution for the Blind to assist in the provision of one or more Home Teachers whose duties shall be to visit, read to, and give such instruction as may be desirable to Blind Persons in their own homes, and also assist in keeping and maintaining a Register of the Blind.

## 7. HOMES.

To provide, when desirable and when circumstances permit, Homes for the care of adult Blind Persons who are in need of such provision.

## 8. UNEMPLOYABLE OR OTHER DESTITUTE BLIND PERSONS.

(a) In conjunction with the Public Assistance Committee, to consider the cases of unemployable or other destitute Blind Persons who are in need of institutional or other non-domiciliary assistance, and to render such assistance as may be desirable in each case, either by payment of recognised fees at approved Homes for the Blind, by boarding out or otherwise.

(b) To provide such domiciliary assistance as may be necessary to any blind person who, in accordance with the declaration made with regard to the domiciliary assistance of Blind Persons in the Council's Administrative Scheme under Part I. of the Local Government Act, 1929, must be dealt with under the Blind Persons Act, 1920.

## 9. REGISTRATION.

To maintain a Register of Blind Persons in the Administrative County.

## 10. HOSTEL ACCOMMODATION.

In conjunction with the Royal Midland Institution for the Blind, to provide and maintain Hostel Accommodation for those employed in workshops who require such provision.

## 11. GENERAL.

To make provision for the general social welfare of the Blind by the provision of embossed literature, social centres, pastime occupations, concerts, lectures and similar means, and, with the consent of the Minister of Health, by any other method.

**MENTAL DEFICIENCY ACTS, 1913 and 1927.**

The Mental Deficiency Acts are administered in this County by the Mental Deficiency Act Committee. The number of cases dealt with and the action taken up to the end of 1930 are as shown in the following table:—

TABLE XLVII.

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
A.—NUMBER OF CASES “ SUBJECT TO BE DEALT WITH ” :—			
1. Under “ Order ” :—			
(a) (1) In Institutions (excluding cases on Licence) ...	40	121	161
(2) On Licence from Institutions	3	4	7
(b) (1) Under Guardianship (ex- cluding cases on Licence)	2	3	5
(2) On Licence from Guardian- ship ... ..	—	—	—

2. In " places of safety " ... ..	3	4	7
3. Under Statutory Supervision ...	123	82	205
Of whom :—			
(a) Attending Occupation Centres ... ..	—	—	—
(b) Awaiting removal to an Institution ... ..	61	54	115
4. Action not yet taken under any one of the above headings—			
(a) Notified by Local Education Authorities, Sec. 2(2) ...	—	—	—
(b) Mental Defectives in receipt of Poor Law Relief :—			
(1) Indoor Relief ... ..	23	33	56
(2) Outdoor Relief ... ..	18	34	52
(c) Otherwise " ascertained " ...	9	4	13

B.—NUMBER OF CASES WHO MAY BECOME  
" SUBJECT TO BE DEALT WITH " :—

1. In Institutions or under Guardian- ship dealt with under Sec. 3 :—			
(a) In regard to whom the Local Authority contributes un- der its permissive powers ...	—	6	6
(b) Maintained wholly by parents, relatives or others ... ..	5	4	9
2. Reported to the Local Authority from any reliable source but as to whom no action has been taken ... ..	275	257	532
3. Under Voluntary Supervision ...	(Supervised by Health Visitors).		
Of whom, attending Occupa- tion Centres ... ..	—	—	—

The position with regard to Mental Deficiency Institutions and the accommodation of mentally defectives in Institutions is referred to in the Section of the Report relating to Hospitals, on page 51.

Last year I dealt at some length with the question of mental deficiency, referring to the powers of the Mental Deficiency Acts, 1913 and 1927, and the Mental Treatment Act, 1930, indicating, with regard to the latter Act, the procedure which, in my opinion, should be adopted in this County so as to carry out the intentions of that Act with regard to the treatment of incipient and early cases of mental infirmity.

TABLE XLVIII.  
**SUMMARY OF WORK DONE BY HEALTH VISITORS  
 DURING 1930.**

1. MATERNITY AND CHILD WELFARE.

(a) *Ante-Natal*—

Attendances at Ante-Natal Centres:

Ante-Natal	...	...	...	...	3,117
Post-Natal	...	...	...	...	280

Total visits to homes—

First visits	...	...	...	1,332	
Subsequent visits	...	...	...	902	
				—	2,234

Sessions at special Ante-Natal Clinics	...	282
--	-----	-----

(b) *Infant Welfare*—

First visits to infants	...	...	9,138	
Other visits (under 1 year)	...	...	28,206	
Visits to children 1—5 years	...	...	51,057	
			—	88,401

(c) *Attendances at Infant Welfare Centres*—

Expectant mothers (at Welfare Centres)	826
Infants under 1 year ... ..	35,095
Children over 1 year ... ..	28,144
No. of Health Visitors' sessions at Infant Welfare Centres ... ..	1,769

2. TUBERCULOSIS—

No. of visits to homes	...	...	...	8,163
No. of Dispensary sessions attended	...	...	...	810

3. SCHOOL MEDICAL INSPECTION—

Medical Inspections—Elementary	...	...	37,051
Do. Secondary	...	...	4,268
Verminous inspections	...	...	141,982
Other Inspections	...	...	22,664
Home visits to school children	...	...	13,981



*Clinic Sessions attended—*

Tonsil and Adenoid operation	...	...	952
Ear	...	...	213
Eye	...	...	409
Dental anæsthetic (2 sessions a day)	...	...	252

## 4. MENTAL DEFICIENCY—

Visits to homes	...	...	1436
-----------------	-----	-----	------

## 5. BLIND PERSONS ACT—

Visits to homes	...	...	2,915
-----------------	-----	-----	-------

## 6. MISCELLANEOUS VISITS

## 7. Infant Life Protection Visits

## 8. Boarding-out Visits

## APPENDIX II.

In the Section of my Report for 1929 dealing with Hospitals, I stated that as a general policy there should be one hospital for any area, and the work of that hospital should be as comprehensive as medical and other circumstances would permit.

I have been asked by many, for the outline of such a policy and have referred them to a Paper bearing on this, which I read before the Royal Sanitary Institute at Sheffield in 1929 and which I now add as an Appendix to this Report. In the Paper I refer to a map (reproduced in my last Annual Report,) shewing the Institutions existing in the County.

In publishing the Paper, I have to acknowledge the courtesy of the Royal Sanitary Institute for allowing me to reprint it from Vol. L., Number 43 of the Journal of the Royal Sanitary Institute.

**The Utilisation of Existing Institutions for a Complete Maternity Service within a County,** by W. M. ASH, M.B., F.R.C.S., D.P.H.,  
Medical Officer of Health, Derbyshire C.C.

In a paper of this description, where space is limited, I find it difficult to confine my remarks within the bounds of the title. The reason for this is obviously that a maternity service itself cannot be bounded so as not to overlap other services, for it is an integral part of the whole service of public health. The maintenance and betterment of the public health is one great service, in which the curative and preventive sides merge one into the other, and any attempt at

separation of them is detrimental to the whole, whilst anything which will tend to promote closer union, not only between these two main branches, but between the numerous sub-branches, will be to the general good.

The scheme I place before you for the utilisation of existing institutions is based on co-operation and co-ordination of existing services, both voluntary and official. It would do more to bring the general practitioner into the general scheme of things than any other step I can conceive, for cottage hospitals are pre-eminently general practitioner hospitals. It would bring the atmosphere of prevention into institutions where the curative side of public health has hitherto been, to say the least of it, predominant.

Although in my paper I have endeavoured to confine my remarks to a maternity service, the general principle is applicable to a number of other branches of public health.

Co-operation with cottage and other hospitals for the provision of lying-in accommodation I first propounded in my Annual Report for 1925. In January, 1928, I unofficially placed the suggestions put forward in this paper before prominent members of my Council intimately concerned with the Service, and intimated that it was my opinion that development should be along these lines.

The coming into force of the Local Government Act, 1929, has not only strengthened my views in this matter, but, what is more important, has facilitated such co-operation between local authorities and voluntary bodies, as is suggested in this paper. There is just one point which I cannot refrain from making. Under the Act, the local authorities will be called upon very largely to pay the piper and to be responsible for the proper running of the services, and it is therefore but equitable that their voices should be heard when the tune is called.

In this paper the word "institution" is used in its widest interpretation, and includes not only buildings, but instituted services.

It will be appreciated that the provision of a complete maternity service in a county is far more difficult of achievement than in a large town. It is as well at this early stage to point out what is meant by a complete maternity service. It comprises:—

1. Ante-natal supervision either at patients' homes or at centres.
2. Midwifery and maternity nursing service by trained nurse-midwives or midwives in the homes.
3. Arrangements for nursing infected cases in their homes.
4. Adequate ambulance service for the transport of patients.
5. Provision of consultants.

6. Facilities for bacteriological examinations.
7. Arrangements for post-graduate lectures and demonstrations for midwives.
8. Provision of accouchement outfits.
9. Investigation of maternal deaths.
10. Hospital accommodation:—
  - (a) Accommodation for lying-in women.
  - (b) Serving ante-natal clinics for complicated midwifery and emergencies.
  - (c) For gynæcological sequelæ of pregnancy with adequate provision for skilled surgical treatment.
  - (d) For cases of ophthalmia neonatorum with dual care of eye specialist and obstetrician (and facilities for accommodating the mother as well as the child).
  - (e) For puerperal fever
11. Provision of home-helps.
12. Domiciliary service by general practitioners.

The two last services mentioned are of particular importance, but as it is impossible to deal with them adequately in this paper, I will do no more than mention them here.

I will deal with hospital accommodation first.

#### HOSPITAL ACCOMMODATION.

In formulating a policy to be pursued for the purpose of providing lying-in accommodation for a large area such as a county, it is necessary at the commencement, bearing in mind the possible magnitude of a completed scheme, to avoid the adoption of any principle which will involve unnecessary expenditure. This consideration leads me to suggest a means whereby I hope to avoid in whole or in part heavy expenditure, both as to capital cost and as to maintenance, which would necessarily accrue from establishing new maternity homes, for not only is any form of building expensive, but small institutions are notoriously uneconomical to run. Further, I consider the building of separate institutions for the purpose of lying-in homes in a county unnecessary, if only some agreement can be arrived at with existing institutions for the treatment of the sick, such as cottage hospitals, general hospitals, and poor law institutions. Many of these have vacant beds which, by re-arrangement, could be grouped into a ward and used for maternity

cases, and where there are not vacant beds in a hospital otherwise suitable, it is more economical and preferable to build a maternity ward on to an existing hospital than to build a separate institution as a maternity home, which of necessity in a county area would be small and uneconomical to run. From the point of view of the hospital, it would provide them with funds, and it would give added interest to the work of the staff. From the point of view of the lying-in woman, it would place her in a position where the appropriate aid is at hand should a surgical or medical emergency arise, as not infrequently happens, and which under the system of separate lying-in homes entails the removal of the patient from the maternity home to the hospital.

I believe that it is for the good of all concerned to make the smaller hospitals, scattered about counties, serve wider interests than they are doing at present, and to concentrate at these centres work which is at present scattered amongst a multitude of small uneconomical institutions and organisations, so enabling the small hospitals in the county to become more of the nature of the general hospitals in big towns.

Such hospitals could serve the purposes set out under headings (a) and (b), and it would be possible to deal with the type of case mentioned under (c) and (d), provided arrangements were made for a consultant drawn from a large centre of population to be available for hospitals within the "consultant area," such as at present exists in Derbyshire under the Puerperal Fever Regulations, as explained later.

*Puerperal Fever* should be accommodated in the larger institutions with an isolation block, but there should also be accommodation for cases of this disease at isolation hospitals which will be usually nearer their homes. Isolation hospitals to-day cannot be considered up to date unless they have a cubicle block for the reception of the multiplicity of notifiable infectious diseases which occur sporadically rather than epidemically, of which puerperal fever is an example. In Derbyshire there are two of this type, but it is to be hoped that all future extensions will take this form.

Skilled nurses could, if required, be provided from the central hospital to nurse such cases in smaller hospitals, and the consultant would be available for patients in hospitals as for patients in their homes within his area.

The map of Derbyshire shows how simple it would be to form such a comprehensive hospital system in that county.



## MIDWIFERY AND MATERNITY NURSING IN THE HOMES OF PATIENTS.

The present system, consisting mainly of midwives, either working on their own or subsidised by the County Council, or combining midwifery with district nursing under the local nursing associations, is to my mind by no means a satisfactory system for county areas as a whole. In the more rural parts it is difficult for a midwife to make a living, and the alternative system of combining midwifery with sick nursing entails grave danger to the lying-in woman, or great hardship to sick persons suffering from infectious and septic conditions, as these the nurse must cease to attend if carrying on a midwifery case. This is a constant source of trouble to the supervising authority, difficulty to the nursing associations, and distress to the sick.

In Dame Janet Campbell's report on Maternal Mortality, she quotes Dr. G. Geddes to the effect that septic wounds are the most likely source of contamination, and that "medical practitioners are the most likely members of society to be contaminated by septic wounds." I agree in principle, but I would point out that a district nurse midwife nursing septic cases, and often living with them, is more liable to be contaminated than are medical practitioners, and therefore if allowed to do sick nursing and midwifery at the same time would be a very real source of danger, and I think, a greater source than the doctors.

It is therefore necessary to separate sick nursing from midwifery, and experience shows that the usual small district nursing association areas cannot carry more than one nurse for the two purposes. The advantage of supplying nurses and midwives from or in connection with central institutions are obvious.

My suggestion for overcoming this difficulty is that the hospitals mentioned under the previous heading should not only accommodate in-patients, but should provide for *midwifery and sick nursing in an area around them*, just as do many of the London hospitals for midwifery alone.

Again, referring to the map of Derbyshire, it will be seen that if the hospital areas thus formed around existing hospitals had an average radius of five miles they would include every home in that county, with but few exceptions, and five miles is a very short distance in these days of the motor car. These services in the area around a hospital, together with the work within the hospital, should make it possible to provide sufficient staff to enable sick nursing and midwifery in the district to be separated. The hospital should be prepared to provide for the nursing of infectious lying-in cases in their homes should the accommodation of the hospital be unable to meet the requirements at any time. These duties might be interchangeable amongst the nursing staff, thereby increasing the interest of a district nurse's life.

*A hospital should also be the centre of the ambulance service for its area*, instead of as at present, the ambulance being run by a separate body and kept in situations more or less remote from hospitals. Whilst the ambulance would be primarily for the conveyance of patients to the hospital, it might in emergency be used to take a nurse to a distant case; but the provision of a small car at each hospital for the staff engaged on district nursing would be a matter of but slight additional cost in the budget of a hospital run on the comprehensive lines suggested.

*Again, the hospital should be the centre from which accouchement outfits could be distributed* to necessitous cases. It should also provide facilities for the disinfection and sterilisation of these and the midwives' equipment.

*Facilities for bacteriological examinations* are best provided by arrangement with laboratories attached to universities or large hospitals, or by contracting with efficient private laboratories where there is no County Council laboratory.

With regard to the *investigation of maternal deaths*, I need say no more than that is an integral part of a complete maternity scheme, and has been carried out in Derbyshire for some years.

#### POST-GRADUATE LECTURES AND DEMONSTRATIONS TO MIDWIVES.

In a county area it is difficult to bring these facilities to the midwives in the more rural parts. The difficulty is being overcome in Derbyshire by the formation of midwives' clubs, which hold regular meetings in various parts of the county.

The lectures are given by the Maternity and Child Welfare Officer at these meetings, which are very largely of a social nature.

The scheme works far better if it can be based on a hospital area. At the present time this is not possible throughout the county, as there are not hospital areas, but the first club was formed in an area with a municipal maternity home as a centre, where demonstrations as well as lectures can be given. This club is an undoubted success, very largely due to the aid given by the hospital staff.

#### PROVISION OF CONSULTANTS.

Derbyshire has been divided into three consultant areas. One, including an area of roughly 20 miles around Derby, another a similar area around that part of Derbyshire bordering on Sheffield,

the third a similar area surrounding Manchester. These areas between them cover the whole county. From these large centres of population consultants of the highest standing are obtainable for service under the Puerperal Fever Regulations, both in the homes and hospitals within the respective areas. These are the "Consultant Areas" mentioned under the heading of "Hospitals." The working of this arrangement in the case of puerperal fever has been so successful that extension to the whole maternity service is desirable, and would be easy to accomplish.

I submit, therefore, that there is in existence, most certainly in Derbyshire, and probably elsewhere, the foundations of a comprehensive scheme of midwifery and sick nursing, and that the raising of the necessary superstructure on these foundations entails but amendment of them here and there, additions here and there, and, above all, co-ordination of the services in every direction.

At present these various services are run by a multiplicity of different bodies and organisations. So disconnected are they as to be unrecognisable in their true form, namely, as units of one complete service which comprises within it, amongst other things, a complete maternity service.

I take it that voluntary hospitals are willing and anxious to co-operate with the County Councils, and I hope that this opportunity of co-operating for the provision of a complete maternity service will not be overlooked.

I hope, too, that the nursing associations and those voluntary bodies who provide ambulance services will also co-operate with the voluntary hospitals, and that they will combine to produce some such scheme as that I have placed before you.

Voluntary bodies have fulfilled a very useful function in the past, and I think they have a very useful function to fulfil in the future. What is to be avoided more than any other thing is competition between what will be county hospitals and voluntary hospitals.

The Local Government Act of 1929 recognises the need for increased facilities for the treatment of the sick (which includes the treatment of pregnant women). It also recognises the work done by voluntary bodies and provides for payment of grants to such bodies, particularly indicating those whose activities are in connection with maternity and child welfare.

The scheme which I have laid before you was formulated over a year before the Act came into force, but its formulation was the result of recognition on my part of the need for increased facilities for care and treatment of pregnant women and the belief that the existing voluntary organisations are the foundations on which to build. I have but outlined the finished edifice and indicated the manner of its building.





# COUNTY OF DERBY.

## Appendix I.

Table of Deaths during the year 1930 in each of the URBAN Sanitary Districts, Classified according to Diseases.

URBAN SANITARY DISTRICT.	DEATHS FROM SUBJOINED CAUSES.																																TOTALS.		
	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Encephalitis Lethargica.	Meningo- coccal Meningitis.	Tuberculosis of Respira- tory System.	Other Tuberculous Diseases.	Cancer. Malignant Disease.	Rheumatic Fever.	Diabetes.	Cerebral Hemorrhage, etc.	Heart Disease.	Arterio Sclerosis.	Bronchitis.	Pneumonia (all forms).	Other Respiratory Diseases.	Ulcer of the Stomach or Duodenum.	Diarrhoea, etc. (under 2 yrs)	Appendicitis and Typhlitis.	Cirrhosis of Liver.	Acute and Chronic Nephritis.	Puerperal Sepsis.	Other Acci- dents and Diseases of Pregnancy & Parturition.	Congenital Debility and Malformation Including Pre- mature Birth.	Suicidea.	Other Deaths from Violence.	Other Defined Diseases.	Causes ill-defined or unknown		Polio- myelitis.	Polio- encephalitis.
ALFRETON ... ..	...	...	...	...	1	3	2	...	...	8	6	26	1	1	16	35	8	5	20	3	...	1	...	...	4	..	1	13	1	11	51	2	...	...	219
ALVASTON & BOULTON ... ..	...	...	..	...	...	2	...	...	...	1	...	2	...	...	2	7	...	...	2	1	...	...	...	2	...	...	1	...	1	7	...	...	...	28	
ASHBOURNE ... ..	1	...	...	...	...	1	...	...	...	3	...	6	...	...	6	9	...	3	...	1	...	...	1	...	...	...	1	...	3	10	1	...	...	46	
BAKEWELL ... ..	...	...	...	...	...	...	...	1	...	3	...	2	...	...	3	3	...	2	...	2	...	...	...	...	2	...	...	2	...	1	8	...	...	...	29
BASLOW ... ..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	2	...	1	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	9	
BELPER ... ..	1	...	1	...	...	1	...	...	...	8	2	13	3	3	8	28	7	3	5	...	...	1	...	3	4	...	...	11	...	6	14	...	...	...	122
BOLSOVER ... ..	1	...	5	1	2	1	...	...	...	3	6	11	1	..	8	13	3	6	6	5	1	1	1	..	5	1	...	6	1	2	16	..	...	...	106
BONSALL... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	4	
BRAMPTON & WALTON ... ..	...	...	...	...	...	...	...	...	...	1	...	3	...	1	2	3	2	1	3	...	2	..	1	..	2	...	1	...	...	1	4	...	...	...	27
BUXTON (Boro') ... ..	...	...	...	1	...	1	4	...	...	10	1	22	..	2	10	30	13	2	12	...	1	1	1	...	12	...	3	9	2	11	24	...	...	...	172
CHESTERFIELD (Boro') ... ..	1	...	12	...	2	15	4	1	...	34	18	66	1	8	58	142	9	30	50	7	6	5	6	...	11	1	1	45	5	32	117	4	...	...	691
CLAY CROSS ... ..	...	...	2	...	...	1	1	2	..	4	...	8	2	...	10	17	2	6	7	...	1	2	1	...	5	...	...	5	4	7	20	...	...	...	107
DRONFIELD ... ..	...	...	...	...	...	...	...	1	...	5	1	9	...	...	2	16	5	4	3	1	...	...	1	...	4	...	...	2	...	2	10	...	...	...	66
GLOSSOP (Boro') ... ..	...	...	1	...	...	1	2	1	...	10	2	36	...	2	17	43	15	13	14	2	4	4	1	...	12	...	1	8	3	7	51	3	...	...	263
HEAGE ... ..	...	...	...	...	...	1	1	...	...	1	2	6	...	1	1	5	...	1	5	...	...	1	...	...	...	...	...	6	...	4	5	...	...	...	40
HEANOR ... ..	...	...	1	1	4	...	7	...	...	16	6	29	1	2	14	41	5	12	5	2	1	1	...	3	5	...	1	15	..	9	41	...	...	...	222
ILKESTON (Boro') ... ..	...	...	...	...	...	...	6	1	1	13	5	32	1	4	27	54	20	19	23	4	5	4	2	1	14	1	3	19	4	7	70	1	...	...	340
LONG EATON ... ..	...	...	...	...	1	...	1	2	...	18	7	29	...	5	12	31	7	7	8	5	3	2	1	...	4	...	1	9	...	6	53	...	...	...	212
MATLOCKS ... ..	...	...	2	...	1	2	2	...	...	5	...	8	...	3	3	32	9	8	7	2	2	...	1	...	6	...	1	8	1	3	25	..	...	...	131
NEW MILLS ... ..	...	...	...	...	...	...	4	2	...	1	2	13	3	1	10	18	5	3	7	...	2	...	1	...	3	1	2	5	1	7	16	...	...	...	107
NORTH DARLEY ... ..	...	...	...	2	...	...	2	...	...	2	...	5	...	2	4	4	3	2	2	...	...	...	...	1	2	...	...	1	1	...	5	1	...	...	39
RIPLEY ... ..	...	...	...	...	...	1	4	...	2	1	1	15	1	...	7	26	5	2	4	1	1	...	...	...	3	...	...	11	...	4	26	...	...	...	115
SOUTH DARLEY ... ..	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	2	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	7	
SWADLINCOTE ... ..	...	...	2	...	...	...	2	...	...	13	5	23	1	4	14	48	...	10	11	...	2	1	1	...	5	1	...	13	2	6	41	...	...	...	205
WIRKSWORTH... ..	...	...	1	...	...	1	...	...	...	2	2	4	1	1	4	20	2	2	4	1	...	1	...	...	...	...	...	1	1	...	15	..	...	...	68
TOTAL OF URBAN DISTRICTS	4	...	27	5	11	31	41	11	3	162	67	370	16	40	242	630	120	142	198	38	31	25	19	8	105	5	15	192	26	130	634	12	...	...	3360



# COUNTY OF DERBY.

Appendix Ia.

Table of Deaths during the year 1930 in each of the RURAL Sanitary Districts, Classified according to Diseases.

RURAL SANITARY DISTRICTS.	DEATHS FROM SUBJOINED CAUSES.																																		
	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Encephalitis Lethargica.	Meningococcal Meningitis.	Tuberculosis of Respiratory System.	Other Tuberculous Diseases.	Cancer, Malignant Diseases.	Rheumatic Fever.	Diabetes.	Cerebral Hemorrhage, &c.	Heart Disease.	Arterio Sclerosis.	Bronchitis.	Pneumonia (all forms).	Other Respiratory Diseases.	Ulcer of Stomach or Duodenum.	Diarrhoea, etc. (under 2 years).	Appendicitis and Typhilitis.	Cirrhosis of Liver.	Acute and Chronic Nephritis.	Puerperal Sepsis.	Other Accidents and Diseases of Pregnancy and Parturition.	Congenital Debility & Malformation (including Premature Birth).	Suicides.	Other Deaths from Violence.	Other defined Diseases.	Causes ill-defined or unknown.	Poliomyelitis.	Poli-encephalitis.	TOTALS.
ASHBOURNE ... ..	...	...	2	...	...	2	...	...	...	2	...	17	...	1	12	19	2	...	4	2	...	1	...	...	4	...	...	8	1	5	34	...	...	...	116
BAKEWELL ... ..	...	...	...	...	...	1	9	...	...	4	2	26	1	6	13	50	12	5	11	...	1	1	...	2	9	1	...	3	4	16	42	...	...	...	219
BASFORD ... ..	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	8	...	...	...	...	...	...	...	...	...	...	1	...	...	4	...	...	...	17	
BELPER ... ..	...	...	3	1	1	...	4	1	...	7	5	38	...	2	16	50	19	6	5	2	3	2	1	...	11	...	1	10	3	13	51	...	...	...	255
BLACKWELL ... ..	...	...	8	...	4	3	5	...	...	19	4	86	2	6	22	60	6	18	37	4	5	7	3	...	10	3	...	27	5	20	68	1	...	...	388
CHAPEL-EN-LE-FRITH ... ..	...	...	...	...	...	...	6	...	...	9	1	23	2	1	16	33	5	5	11	2	...	2	5	1	4	...	...	4	3	7	36	...	...	...	176
CHESTERFIELD ... ..	1	...	15	1	13	17	5	4	1	25	17	87	2	5	42	163	32	47	68	6	5	11	2	1	29	6	5	36	7	42	145	2	...	...	842
CLOWN ... ..	...	...	...	...	1	...	1	...	...	12	3	13	...	4	12	11	2	10	8	2	...	1	3	...	2	1	1	10	2	14	31	1	...	...	145
GLOSSOP DALE ... ..	...	...	...	...	...	...	1	...	...	...	...	6	...	...	5	13	2	2	2	...	...	...	...	...	2	...	...	...	1	4	7	...	...	...	45
HARTSHORNE & SEALS ... ..	...	...	...	...	...	...	2	...	...	...	1	17	...	...	3	12	4	7	3	...	1	...	2	...	4	...	...	5	1	3	19	...	...	...	84
HAYFIELD... ..	...	...	...	...	1	...	1	1	...	...	...	7	...	1	8	11	3	...	5	...	...	...	...	...	...	...	...	3	1	2	17	...	...	...	61
NORTON ... ..	...	...	...	...	...	1	1	...	...	2	...	12	1	1	3	14	7	1	2	...	1	...	1	...	1	...	...	1	1	1	7	...	...	...	58
REPTON ... ..	...	...	...	...	1	1	3	...	...	6	2	21	...	1	16	48	7	7	14	1	2	...	2	...	8	1	2	8	...	5	29	...	...	...	185
SHARDLOW ... ..	...	...	1	...	...	3	1	1	...	16	1	38	1	5	23	67	11	17	18	4	3	3	1	3	6	1	2	19	8	24	91	1	...	...	369
SUDBURY ... ..	...	...	...	...	...	1	...	...	...	1	...	6	...	...	1	6	1	...	1	...	...	...	...	...	...	...	...	...	...	7	...	...	...	24	
TOTAL OF RURAL DISTRICTS	1	...	29	2	21	29	39	7	1	108	36	351	9	33	192	565	113	125	189	23	21	28	20	7	90	13	11	135	37	156	588	5	...	...	2979
WHOLE COUNTY.																																			
RURAL DISTRICTS .. ..	1	...	29	2	21	29	39	7	1	103	36	351	9	33	192	565	113	125	189	23	21	28	20	7	90	13	11	135	37	156	588	5	...	...	2979
URBAN DISTRICTS .. ..	4	...	27	5	11	31	41	11	3	162	67	370	16	40	242	630	120	142	198	38	31	25	19	8	105	5	15	192	26	130	634	12	...	...	3360
WHOLE COUNTY .. ..	5	...	56	7	32	60	80	18	4	265	103	721	25	73	434	1195	233	267	387	61	52	53	39	15	195	18	26	327	63	286	1222	17	...	...	6339











